



PPPs: Worldwide Experiences

PPP Aruba 2011 Conference

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GRAND TRUNK PARTNERS

Giridhar Srinivasan– Personal Background

Personal background

- ◆ Experience working on over \$8 billion of PPP / infrastructure transactions
- ◆ Infrastructure investment banker at Rothschild; started infrastructure fund at Lehman Brothers. Former management consultant at firm run by ex-McKinsey & Co. partners
- ◆ MBA from Wharton

Selected client list

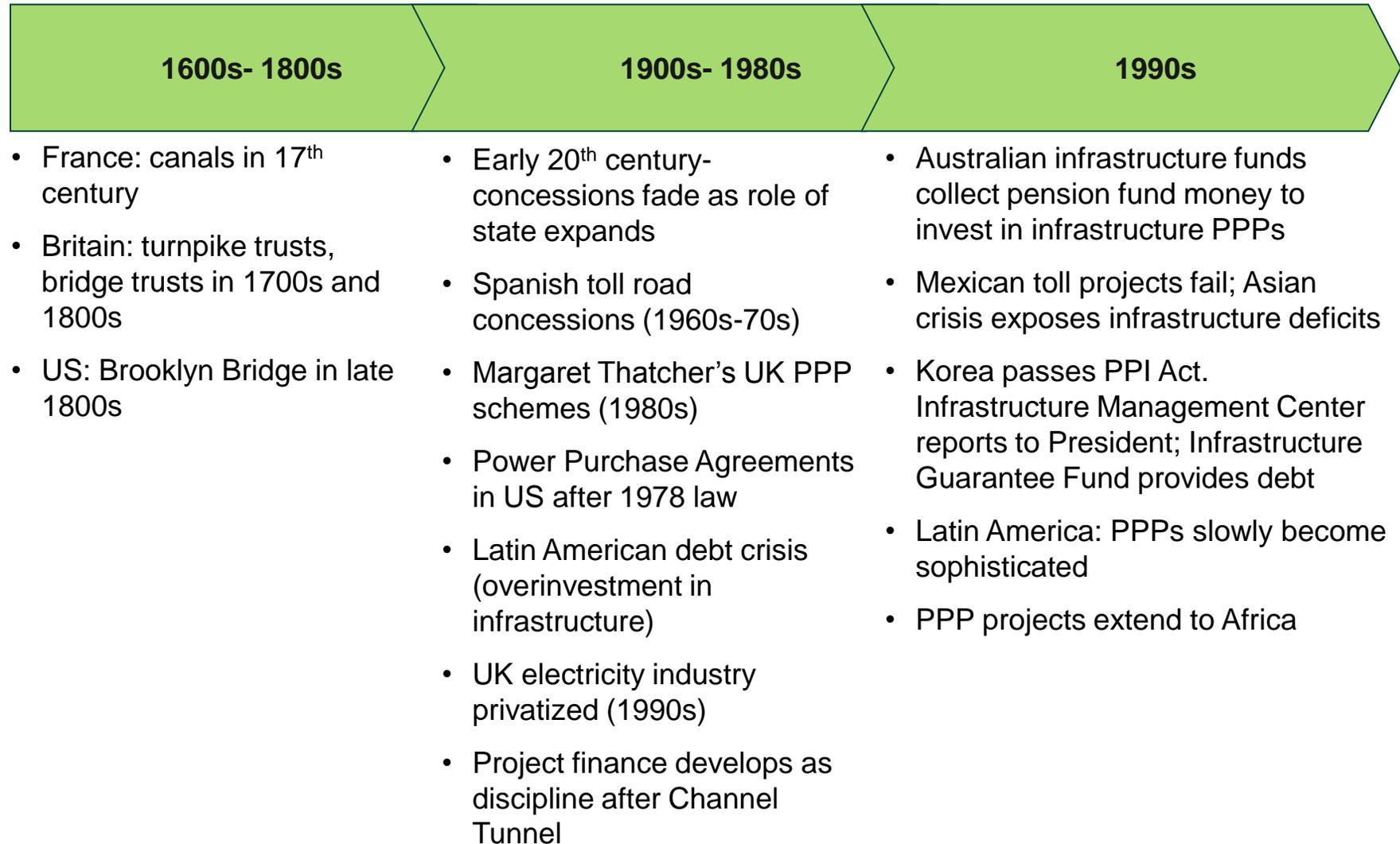
- ◆ Infrastructure funds run by Carlyle, GE-Credit Suisse, Deutsche Bank, JP Morgan, Hutchison Whampoa
- ◆ InfraVentures: \$100m infrastructure fund at International Finance Corp (part of the World Bank)
- ◆ \$3 billion fund-of-funds run by Private Infrastructure Development Group
- ◆ Government ministers and PPP units

Selected project list

- ◆ Worked on projects in North America, South America and Africa
- ◆ Developing 20 MW solar power project in Africa, the first large solar project in Sub-Saharan Africa
- ◆ Developing 10 MW hydro power project in Africa
- ◆ Roads: Pennsylvania Turnpike, Trans-Texas Corridor-69
- ◆ Ports: P&O Ports North America/ Dubai Ports World transaction; four container terminals sold by Orient Overseas International Ltd of Hong Kong; largest automotive ports in North America
- ◆ **Contact: gkrinivasan@grand-trunk.com US mobile: +1 917 721 7176**

1. PPPs have a long history

1.1 Contract structures have evolved and been refined



1. PPPs have a long history

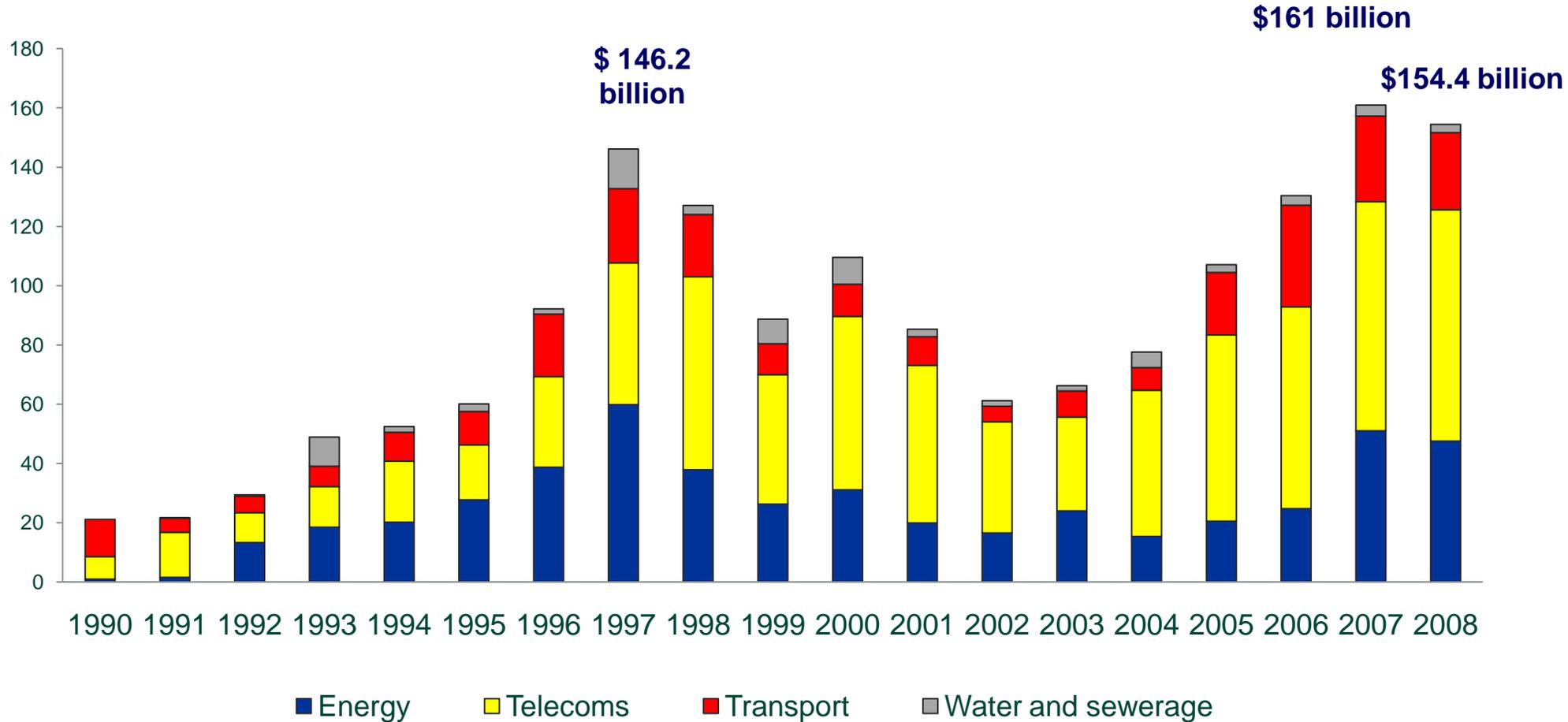
1.2 Increasing investor demand especially from pension funds



- Canadian pension funds start investing up to 15% of portfolio in infrastructure
 - *Dutch pension funds (ABP, Ahold, PGGM) are huge infrastructure investors*
 - Middle East oil funds start infrastructure companies, in ports, airports, etc.
 - Mobile telecoms investment boom
- PPP investment picks up in India, China, Brazil
 - Big road privatizations in the US (Chicago, Indiana) fuel a valuation bubble
 - Private funds raised on Wall Street, and in Europe, Asia and Middle East
 - Political resistance to PPPs in US: “won’t sell crown jewels” (Pennsylvania Turnpike)
- Some overleveraged Australian infrastructure funds collapse
 - Post-crisis, governments now have no choice: tight budgets forcing them to turn to PPPs
 - \$23.5 billion raised for all emerging market private equity in 2010 vs. \$22.6 billion in 2009
 - Latin America & Caribbean: \$5.6 billion raised in 2010 for future investment; \$6.6 billion invested
 - \$180 bn available to invest globally for infrastructure; over 100 funds seeking additional \$125 bn
 - Renewable energy, Asia and Africa are growing themes

2. Infrastructure PPP investment trends

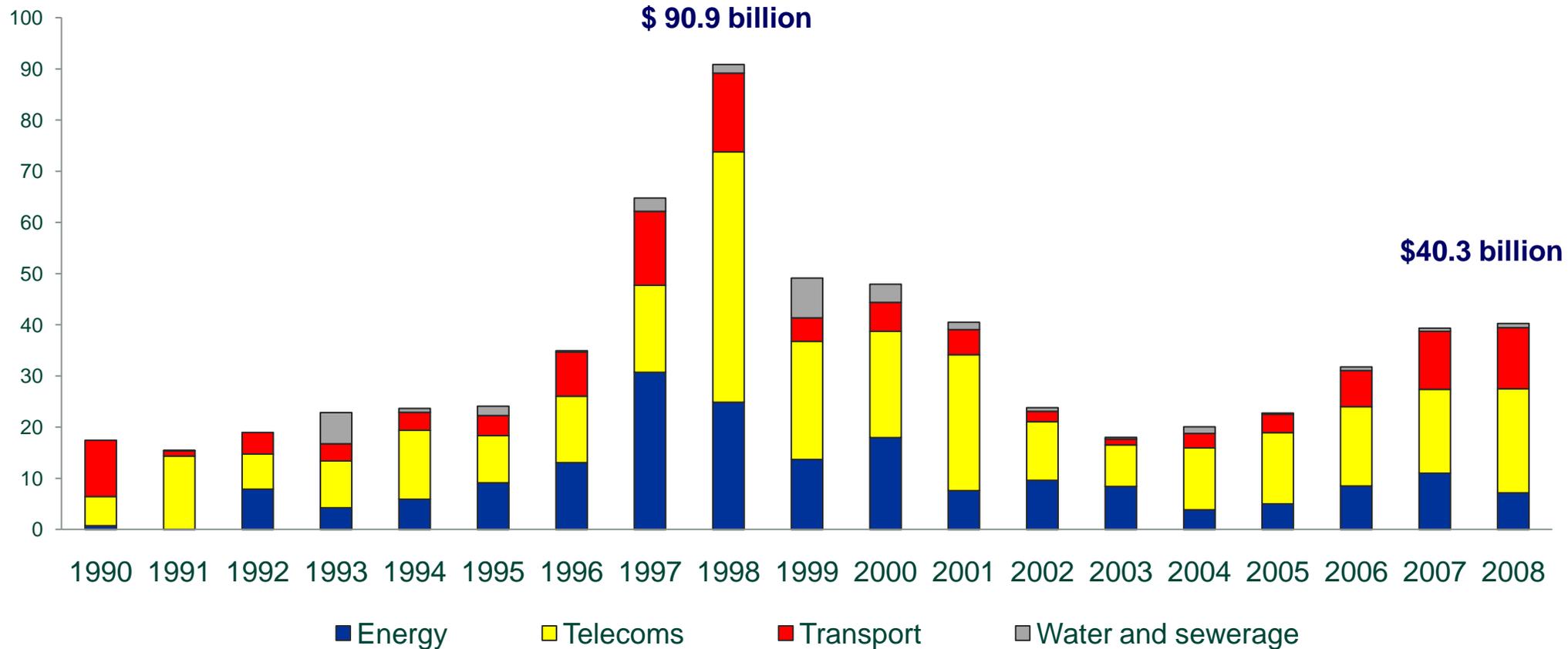
2.1 Investments in infrastructure PPPs in developing countries (1990–2008)



Source: World Bank and PPIAF, PPI Project Database.

2. Infrastructure PPP investment trends

2.2 Investment commitments to infrastructure PPPs in Latin America & Caribbean, by sector

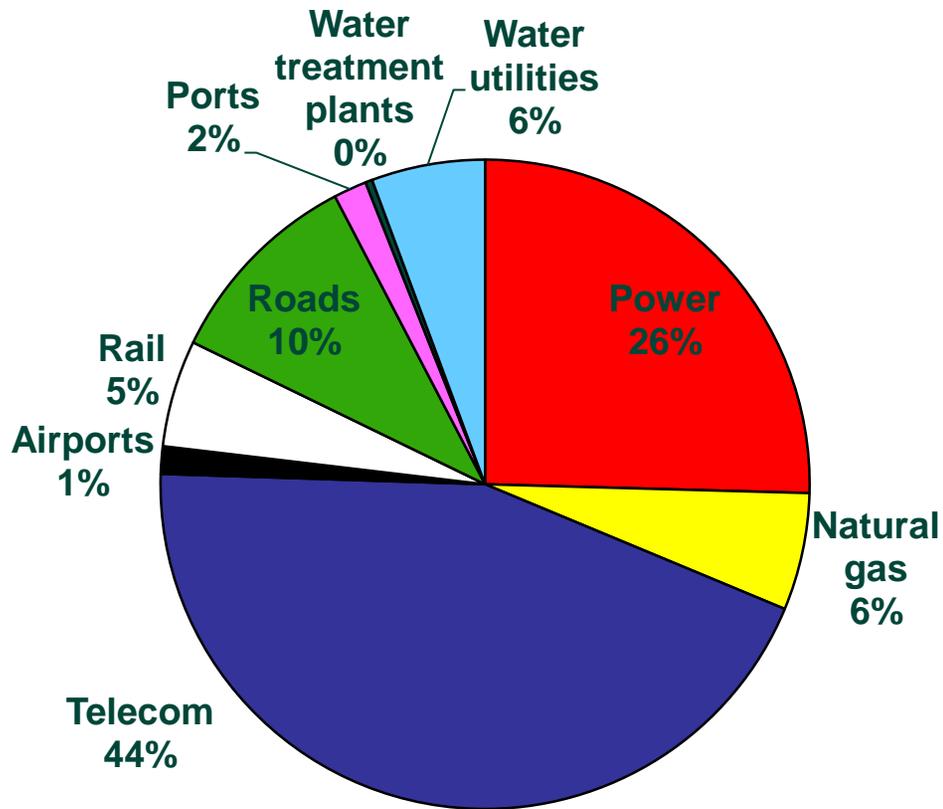


Source: World Bank and PPIAF, PPI Project Database.

2. Infrastructure PPP investment trends

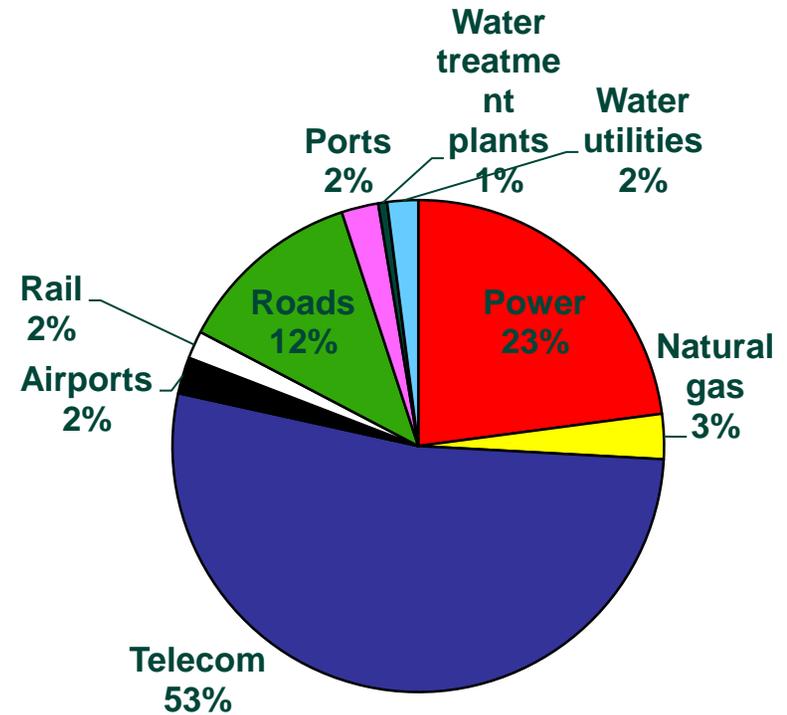
2.3 Sector breakdown of infrastructure PPP investment in Latin America & Caribbean

1990–2000



Total: \$410.2 billion

2001–2008



Total: \$236.5 billion

Source: World Bank and PPIAF, PPI Project Database.

3. Tradeoffs of doing a PPP

3.1 When governments face a budget crunch, private investors can bring in additional investment through PPPs

Pros	Cons
<ul style="list-style-type: none">• Instead of paying for everything up front from the first year's budget, project cost can be spread out over the life of the project• PPPs can potentially be a form of off-balance sheet financing	<ul style="list-style-type: none">• While the future annual fees paid by government may not show up as an accounting liability on the government balance sheet, governments must still find the funds to pay for the project .• Project will affect the government's future cash flows, just like debt will• This is <u>not</u> free money

3. Tradeoffs of doing a PPP

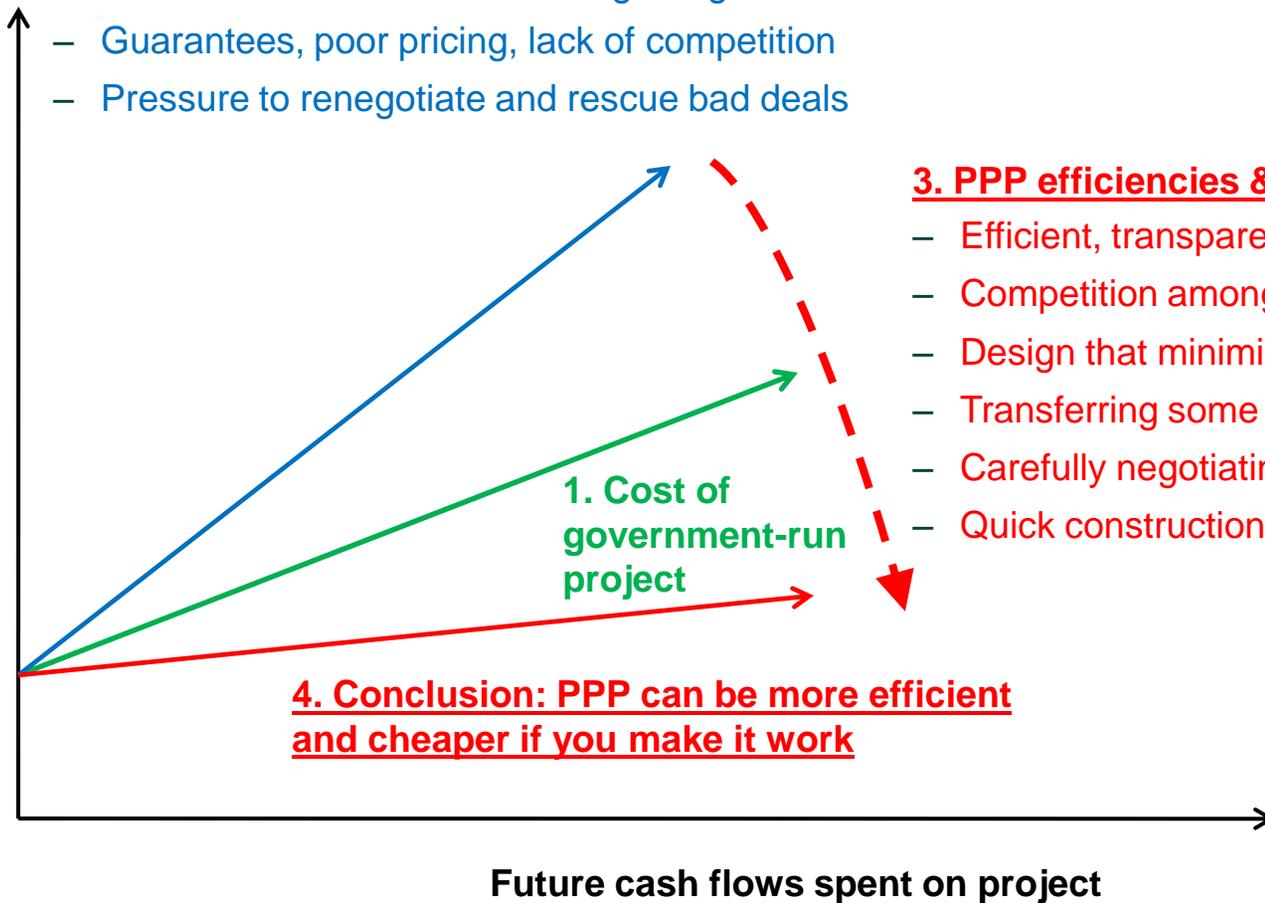
3.2 Does a PPP offer better Value-for-Money than if the government ran the project?

2. What could drive a PPP's costs higher?

- Private sector's cost of financing is higher
- Guarantees, poor pricing, lack of competition
- Pressure to renegotiate and rescue bad deals

Higher
annual cost

Lower
annual cost



1. Cost of
government-run
project

4. Conclusion: PPP can be more efficient
and cheaper if you make it work

3. PPP efficiencies & cost savings come from:

- Efficient, transparent bidding process
- Competition among bidders
- Design that minimizes future maintenance costs
- Transferring some risks to private sector
- Carefully negotiating prices & non-financial terms
- Quick construction, efficient operation

3. Tradeoffs of doing a PPP

3.3 Can have lower construction costs, faster construction

Pros	Cons
<ul style="list-style-type: none">• Government-run projects: often late and over budget. Private contractor doesn't have incentive to be efficient, because they have "cost-plus" contracts• PPP: equity owners will demand a fixed-price, date-certain contract from subcontractors. Investor doesn't generate cash flow until they finish construction• Easier for government to hold a single private company accountable, to finish on-time	<p>To avoid overpaying, you have to be certain of your plans in advance, and analyze options carefully</p> <ul style="list-style-type: none">• PPP projects and contracts are very complex. Costs may not always be clear to the public• If the government changes its mind after the bid, project can get very costly• If you just reimburse the developer for "extra costs incurred", you have lost the benefit of the PPP• If there is a cost overrun, private operators will try to renegotiate the contract

3. Tradeoffs of doing a PPP

3.4 PPP allows for clear accounting of life-cycle costs. Better project design yields significant Value for Money

Pros	Cons
<p>Private operator will choose design and technology with fewer maintenance needs</p> <ul style="list-style-type: none">• Government usually chooses option with the lowest up front capital cost. But this neglects future maintenance costs, which are often larger than expected• Since the investor and lenders have to generate cash flows only from the asset for 20-30 years, they will build the asset that has the lowest overall life-cycle cost	<p>Need genuine competition and careful evaluation of technologies</p> <ul style="list-style-type: none">• Need many bids from international parties to compare technologies and options

3. Tradeoffs of doing a PPP

3.5 Careful project structuring can significantly lower operation and maintenance costs

Pros	Cons
<p data-bbox="159 516 905 553">Operation and maintenance costs lowered</p> <ul data-bbox="159 581 974 818" style="list-style-type: none"><li data-bbox="159 581 974 662">• Private company can build and operate more efficiently<li data-bbox="159 695 974 818">• The fixed annual fee forces them to operate and maintain projects better than the government would	<p data-bbox="1050 516 1677 553">Must negotiate guarantees carefully</p> <ul data-bbox="1050 581 1913 911" style="list-style-type: none"><li data-bbox="1050 581 1913 802">• All risks cannot be transferred to the private operator. E.g., a private operator will seek a guarantee from the government that future legislation will not harm their return. Government still has to be involved in the project.<li data-bbox="1050 829 1913 911">• Negotiate contract carefully, to make sure there are no unexpected guarantees or implicit risk transfers

3. Tradeoffs of doing a PPP

3.6 Negotiations are complex, but you are not alone. Lenders' interests are aligned with the government

Pros	Cons
<p>Government has allies who can help negotiate, if things go wrong</p> <ul style="list-style-type: none">• In government-run project, government is often negotiating against private sector• In a PPP, lenders are paranoid about getting their money back. Will deal with inefficient operators swiftly	<p>PPP creates a highly-visible monopoly</p> <ul style="list-style-type: none">• Since the private company is the sole provider of the service, by definition, PPPs create a monopoly contract. Need to regulate the monopoly• If the project fails, there will be pressure on the government to “bail out” the project• Need good advice from experienced practitioners

3. Tradeoffs of doing a PPP

3.7 Renegotiation is common, but can be avoided. Cancellation is rare

◆ *Renegotiation happens very often*

- After bid is awarded, as new issues come up, the operator or government may seek to renegotiate tariff, investment plan, exclusivity, guarantees, concession term, etc.
- 41% of concessions in Latin America & Caribbean, 55% of transport projects, 75% of water and sanitation projects (1990-2001)
- 60% of renegotiations initiated by private sector; 40% by government

◆ **How to minimize renegotiation**

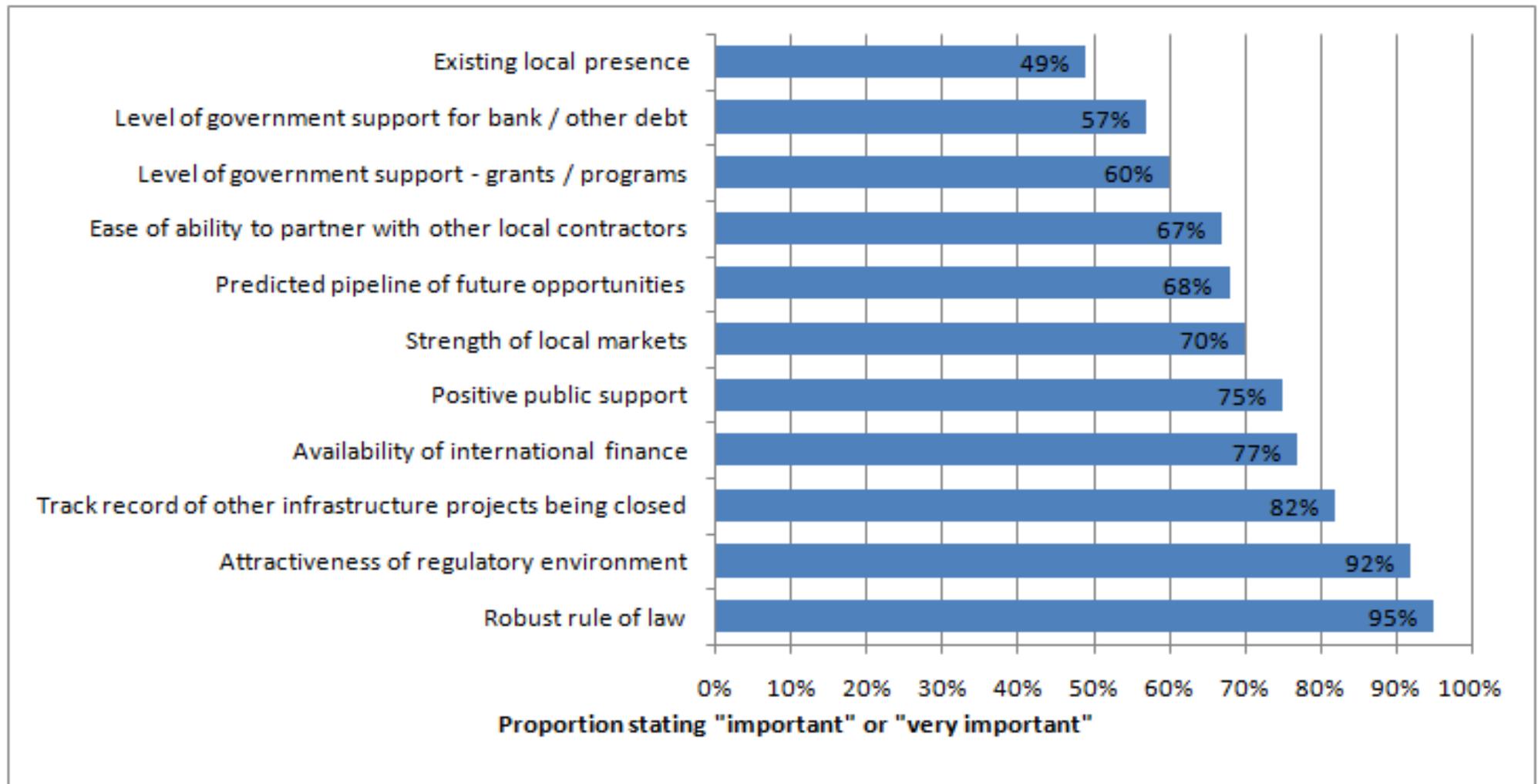
- Thousands of projects (and mistakes) have been done. Learn from the history of failures!
- Use experienced advisors who know standard project terms and structures
- Get public and political support for the tradeoffs (higher prices / better service)
- Competition and transparency help avoid major errors
- Publish project documents
- Use internationally-accepted bid process that investors are familiar with (e.g., World Bank guidelines)

◆ **Cancellation is rare:** less than 2% of all PPPs are canceled / abandoned after award

- Roads and transport:
 - Cancellations happen because of over-optimistic traffic forecasts
 - Blanket government guarantees can make bidders lax about due diligence
- Water sector: 11% of investments canceled. Mostly because of protests over higher prices and politicization

4. Aruba has many factors that can make PPPs successful

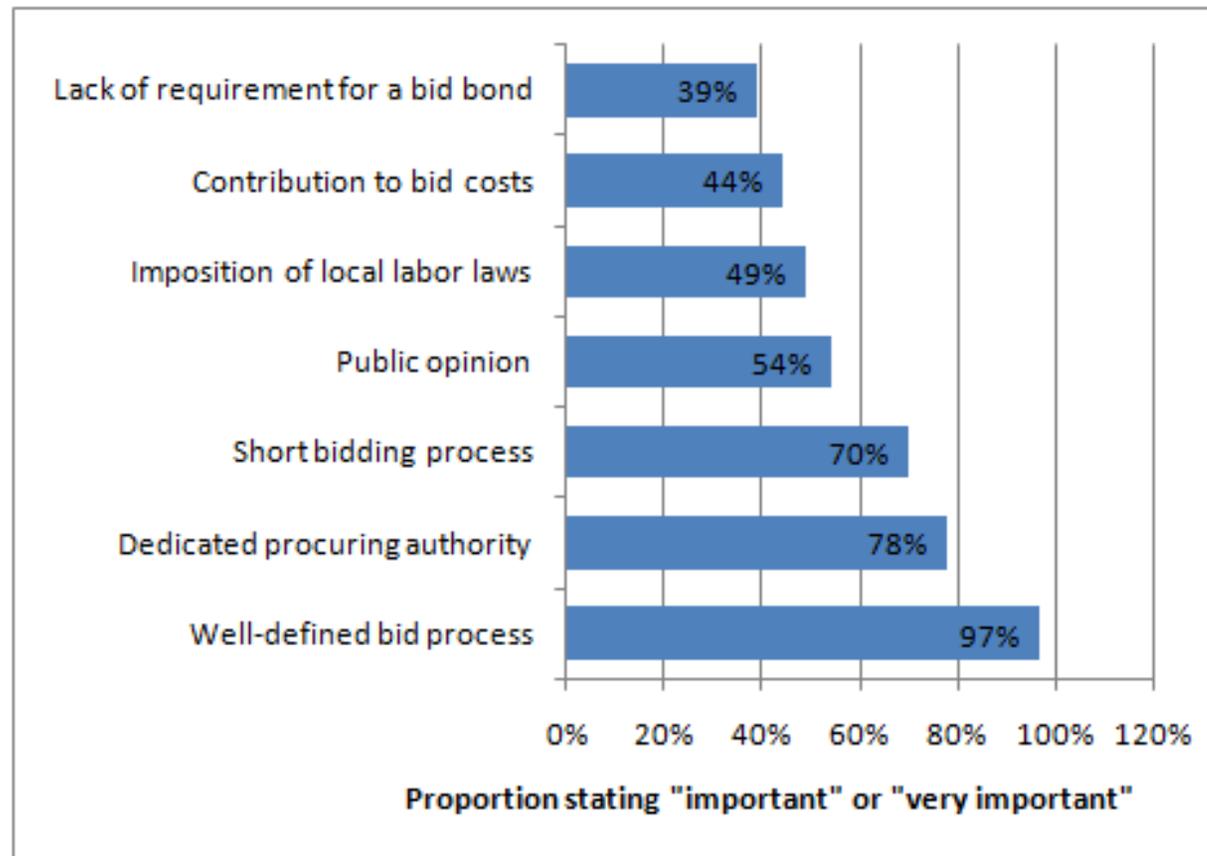
4.1 When deciding where to invest in infrastructure, how important is each of the following factors for an investor?



Source: Allen & Overy 2009 Survey of infrastructure investors

4. Aruba has many factors that can make PPPs successful

4.2 What matters to investors during the procurement process



Infrastructure investors are global in their attitudes. Well-prepared, efficient bid process from a dedicated procurement authority will attract competitive bids

5. Some recommendations for success

