Who Can and Should Finance Infrastructure?
Lessons from International Data

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My point in a nutshell

- There’s clearly an infrastructure gap, in an era of fiscal deficits
- Innovative responses from the private and public sector exist
- But they are unlikely to have a massive impact in filling such gap
- So the non-financial public sector will remain the chief provider and financier
Financing the Infrastructure Gap:  
Private and Public Alternatives
A New Infrastructure Game?

Infrastructure Gap
+ Overall fiscal deficits

Non-budgetary solutions

Government-Based
- State guarantees
- Development banks (and IFIs)

More suitable for: Emerging economies without good governance and investor protection

Market-Based
- Domestic institutional investors
- Foreign Capital

More suitable for: Advanced economies with good governance and investor protection
Actual versus Required Infrastructure Spending in LAC (% of GDP)

Source: Serebrisky et al., IDB, 2015.
Public Infrastructure Spending, in US$ (ppp) per capita

Market-based solutions:
What makes infrastructure financing attractive to private investors?

- Monopoly and high entry barriers
- Long economic life
- Stable and predictable operating cash flows
- Low correlation with economic cycle
Market-based solutions:

What are the risks of infrastructure financing?

✓ High (and irreversible) investment

✓ Long gestation

✓ Unanticipated changes in input prices (during construction phase)

✓ Political and regulatory risk, including contract repudiation
Argentina: Price of residential electricity (US$ per 100 KWh) in 2015 after 2002 freeze in utility tariffs
Pension Funds (and other II) in the Infrastructure Business:  

Pros and Cons (from fund manager viewpoint)

- **Pros:**
  - Maturity match
  - Low correlation with other financial assets

- **Cons:**
  - Heterogeneity and opacity in the infrastructure sector
  - Lack of experience in managing this asset class
  - Regulatory barriers and bias against unlisted vehicles (*mainly in emerging countries*)
  - Investor’s short-term horizon
Pension Fund Assets: Size and Infrastructure Share

OECD Countries
Assets = 123.6% of GDP

Non-OECD Countries
Assets = 36.3% of GDP

% Infrastructure = 0.5% of total
% Infrastructure = 1.6% of total

National Development Banks in the Infrastructure Business: Pros and Cons

**Pros:**

- Focus on long-term projects with positive externalities

**Cons:**

- Conflict of interest in the event of renegotiations and default
- NDBs are typically small, so infrastructure finance may give rise to:
  - **Crowding-out**, jeopardizing other goals such as SME financial assistance
  - Poor portfolio **diversification**
  - **Contingent government obligations**, when assistance takes the form of mezzanine debt or guarantees

*Out of 90 NDBs around the globe, just 4% have an explicit mandate to finance infrastructure* (Luna Martínez and Vicente, 2012)
Development Banks in Latin America and Spain: **Stock of Loans to GDP**

Source: Own elaboration based on annual Reports and Central Banks. Data as of 2015.

**Recall:** LA requires an additional **annual infrastructure investment of 2.0%-2.5% of GDP**
Is Foreign Saving the Answer in LAC (and the world)?

Source: ECLAC. Data for LAC.
Back to Budget:
Why it's still a government problem
Infrastructure as a Public Good

- Non-rivalrous and non-excludable
- Externalities
- Social purpose

Textbook case of a public good
Textbook funding solution:

First resort: Public funding

Last resort: Private funding
Sources of Infrastructure Financing in Emerging Economies (% of total)

- Government Budget: 60%
- Private Finance: 23%
- National DBs: 10%
- IFIs: 7%

Source: Own elaboration based on Bhattacharya and Romani (2013).
Government Share of Infrastructure Investment (in % of total)

Financing Infrastructure and Corporate Investment: Two Different Worlds?

International averages, in % of total funding

Source: Own elaboration based on McKinsey 2013 (infrastructure figures) and Enterprise Surveys, World Bank, 2012 (corporate investment).
About Governments and Infrastructure in Emerging Countries

✓ Governments in emerging countries, and LAC in particular, have since the 2000s:

➢ Enjoyed tax revenue bonanzas

➢ Greatly increased overall and current expenditure

➢ Relatively neglected public investment
**Government Current and Infrastructure Expenditure: The Argentine Case**

- **Overall Government Expenditure:**
  - Year 2000: 25%
  - Year 2016: 42%

- **Government Infrastructure Investment:**
  - Year 2000: 1%
  - Year 2016: 4%

*Should governments repair market failures, or should the market repair government failures?*
Conclusions
Lessons from the data

- General government budgets may remain the main source of infrastructure funding.
- In both developing and developed economies, market failures prevent the private sector to assume a leading role.
- Private sector should certainly be encouraged, most of all through a healthy contracting environment, but without getting the public sector off the hook.
- DFIs have in general limited resources to substitute governments as the chief financier of infrastructure spending.
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