

Domestic resource mobilization. Infrastructure

Setting the scene: Infrastructure patterns in emerging markets

Christian Daude and Ángel Melguizo
Americas Desk
OECD Development Centre



Development Finance Network (DeFiNe)
Annual Meeting
Paris, 10-12 October 2010

Main messages

- **Infrastructures are key for potential growth, development and stabilization policies** (e.g. G20 agenda)

Growth and inequality gaps Asia-Latin America explained by infrastructure gaps – less spending, lower quality (Calderón and Servén, 2004b)

- **Emerging economies: significant infrastructure gaps**

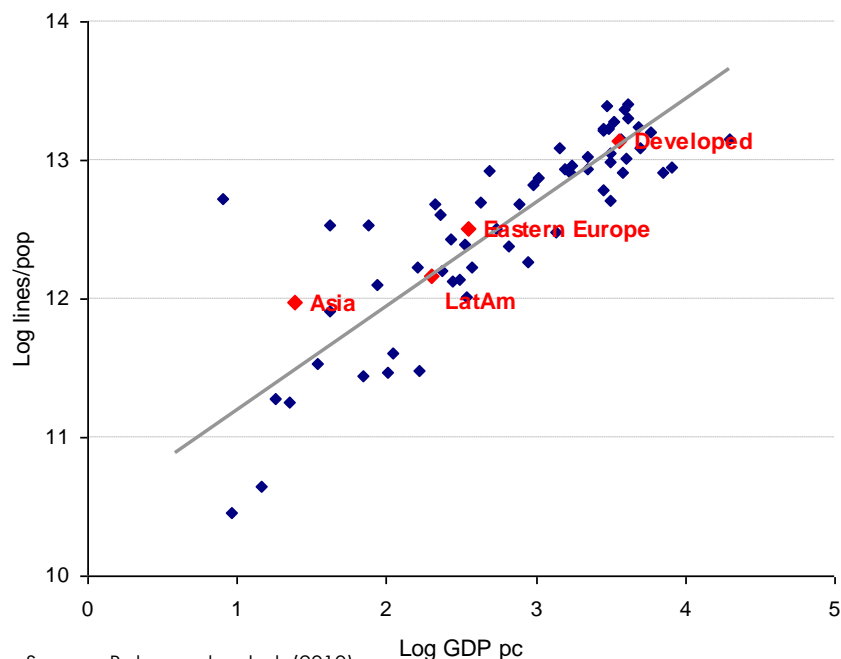
- Latin America lags behind Asia and emerging Europe
- Significant differences across infrastructure types (basic, transport, energy and telecommunications) and countries
- Fundamentals-observed levels (Balmaseda, Daude, Melguizo and Taft, 2010)

- **Policy response**

- Building better institutions (quality of bureaucracy, fiscal position)
- Improving regulation (in particular around public-private financing)

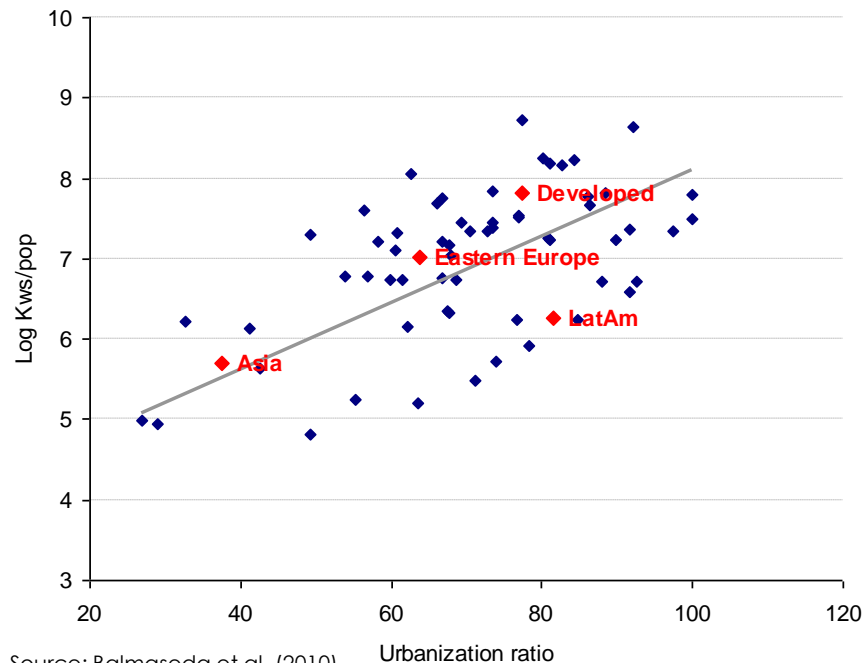
Setting priorities: infrastructure levels

Per capita telephone lines and
Income level, 2007



Source: Balmaseda et al. (2010)

Kilowatts pc and Urbanization
rate, 2006



Source: Balmaseda et al. (2010)

Income and population matter – but so do demographic (age profile), social (urbanization) and economic (sector mix) variables.

Empirical model (Balmaseda et al., 2010)

Explanatory variables

- Per capita income (level and squared)
- Socio- demographics (urbanization, density)
- Productive structure (services and industry vs. agriculture)

Predicted infrastructure patterns (Km/area, KW pc, pc lines)

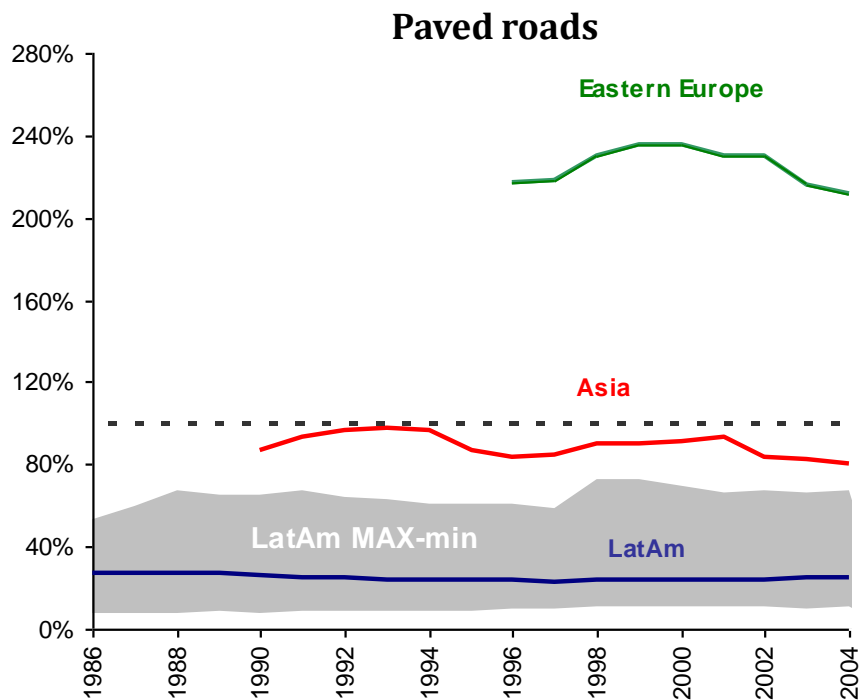
Observed levels (Km/area, KW pc, pc lines)

'Degree of achievement'
(Observed levels/
Patterns)

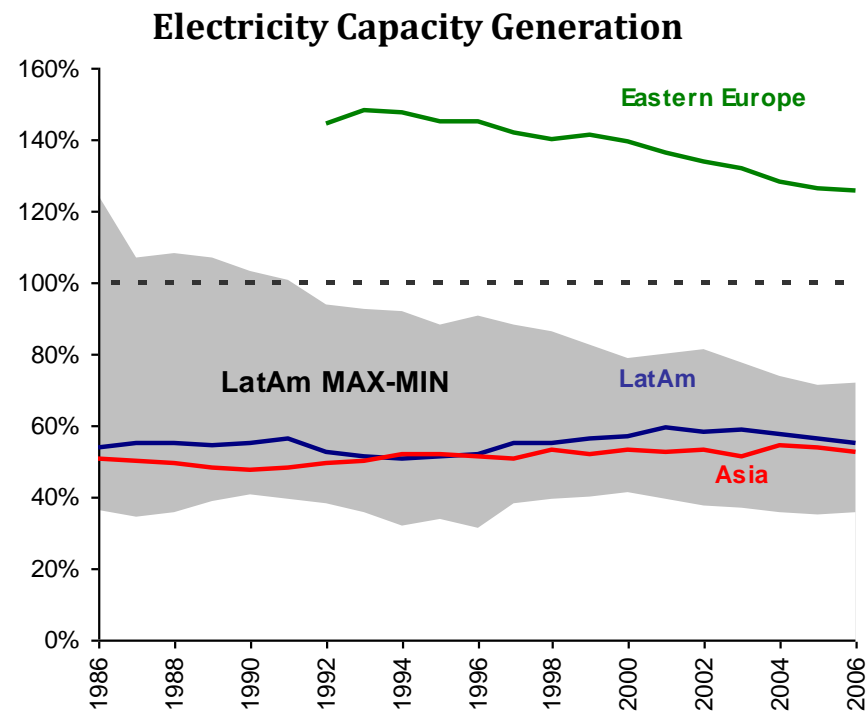
Predicted infrastructure patterns (for country i , in time t) can be compared to actual levels, to estimate gaps and identify priorities.

Results (observed vs. predicted): Priorities

Observed / Predicted (%)



Source: Balmaseda et al. (2010)



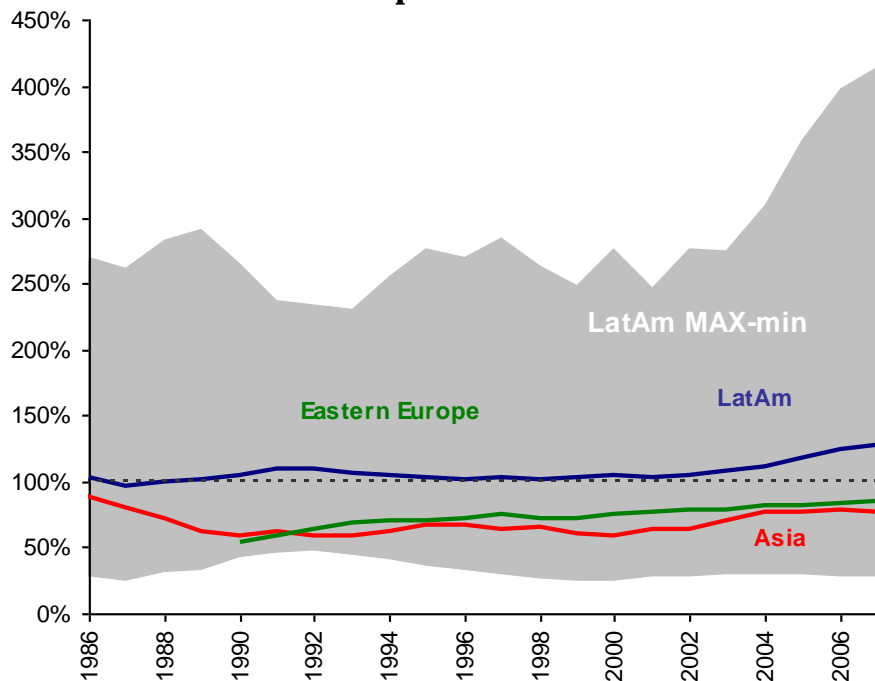
Source: Balmaseda et al. (2010)

Asian and Lat. Am. challenges concentrated in Transport and Energy infrastructure. In LAC, even the regional leader is below predicted levels.

Results (observed vs. predicted): Priorities

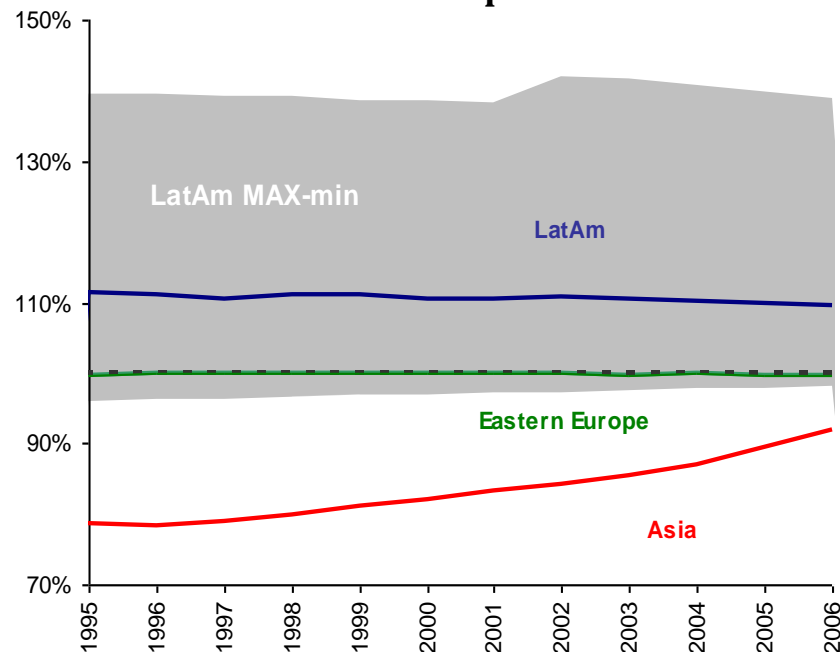
Observed / Predicted (%)

Telephone lines



Source: Balmaseda et al. (2010)

Access to improved water

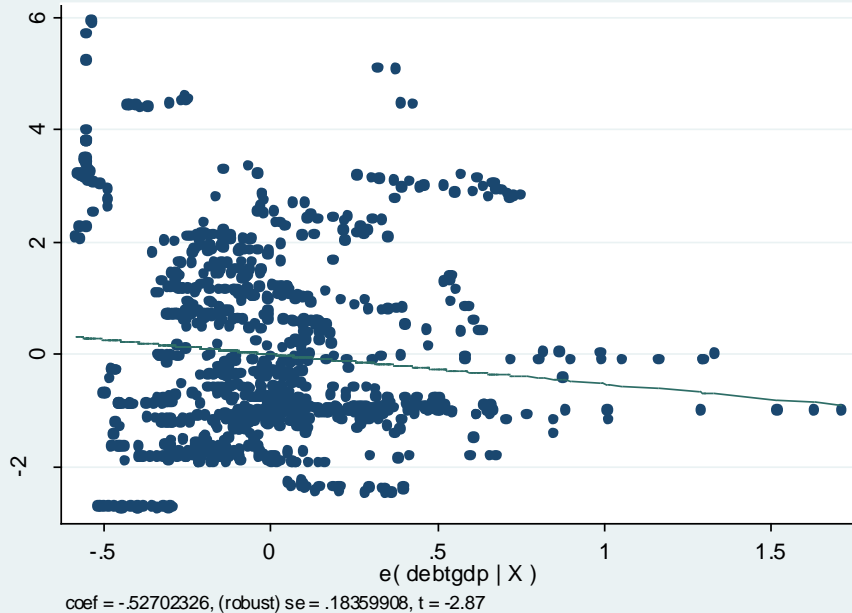


Source: Balmaseda et al. (2010)

The situation in telecommunication and basic infrastructure is more balanced. Some good practices may stem from LAC.

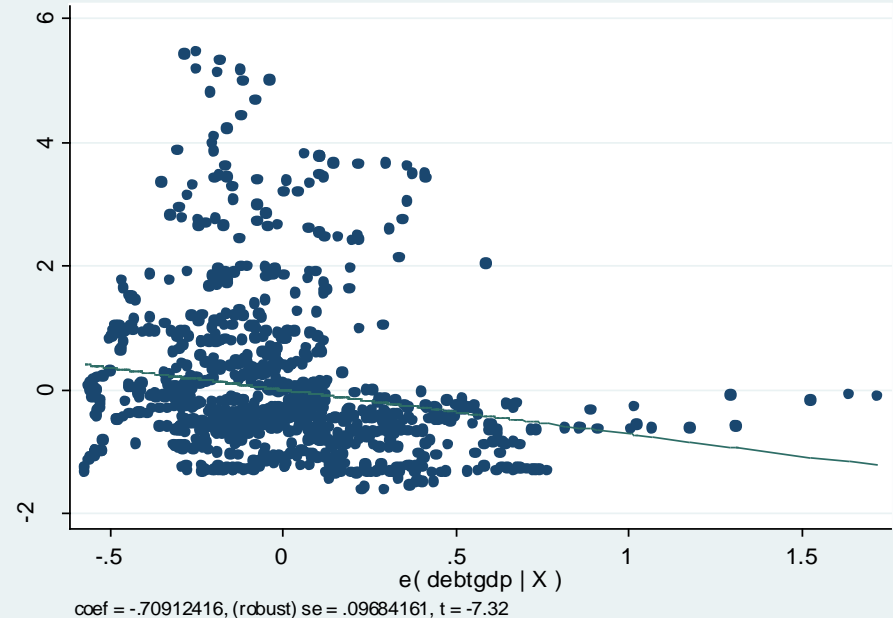
Results (gaps and fiscal balances): Domestic financing

Railways



Source: Balmaseda et al. (2010)

Electricity



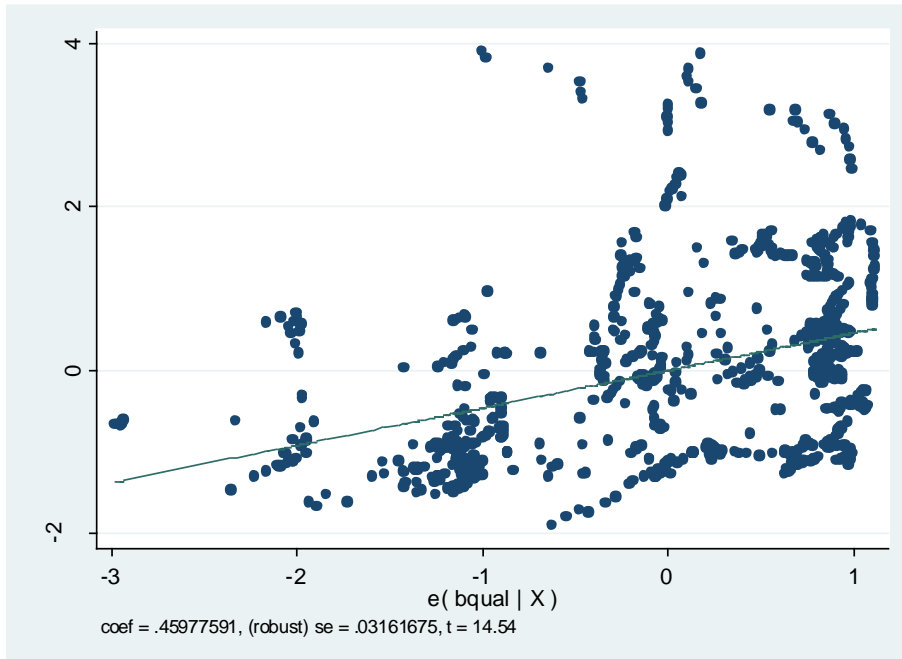
Source: Balmaseda et al. (2010)

Lower public debt ratios are correlated with lower infrastructure gaps

- Fiscal consolidation have been traditionally based on investment cuts (Calderón and Servén, 2004a, Martner and Tromben, 2005 for LAC)
- Public borrowing costs reflect (perceptions of) debt sustainability

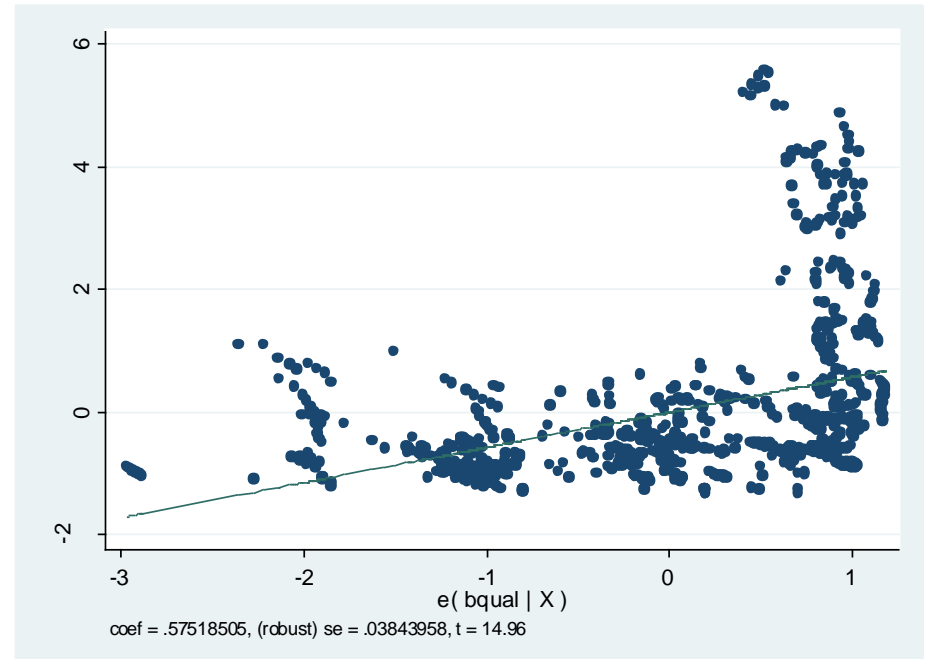
Results (gaps and bureaucracy): Public administration

Paved roads



Source: Balmaseda et al. (2010)

Electricity



Source: Balmaseda et al. (2010)

Better institutions (quality of bureaucracy) are correlated with lower infrastructure gaps

- Need to have domestic resources and management capacity
- Governance, control of corruption, adequate regulation

Domestic resource mobilization. Infrastructure

Setting the scene: Infrastructure patterns in emerging markets

Christian Daude and Ángel Melguizo
Americas Desk
OECD Development Centre

www.oecd.org/dev/americas



Development Finance Network (DeFiNe)
Annual Meeting

Paris, 10-12 October 2010