Infrastructure investment and Pension funds in Latin America

Pensions and Insurance America & Economic Research Department

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Latin America has pioneered structural pension reform

During the 80s and 90s, many Latin American economies introduced DC individual capital accounts, although with significant differences and on-going reforms (Mesa-Lago, 2004).

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<th>Structural reforms</th>
<th>System</th>
<th>Contribution</th>
<th>Benefit</th>
<th>Regime</th>
<th>Administration</th>
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Available projections foresee a notable accumulation of financial resources in pension funds


An increasing role of the pension industry in financing infrastructure is a ‘win-win’ situation

Pension funds offer:

- **Long-term financing**, especially in the early stages of the demographic transition.
- **Domestic financing**, crucial when capital markets in local currency are not developed.

Infrastructure investments offer (Vives, 1999, IPE, 2007):

- **Higher real returns** than the average pension fund portfolio.
- **Diversification**, given that their returns are less than perfectly correlated with the existing portfolio.
- **Higher potential growth**, raising not only returns but also contributions.
- **Social legitimacy** (‘your pensions built this road and this road finances your pensions’, Chile).
However, Latin America exhibits a significant ‘infrastructure gap’ with respect to competing emerging economies.

The infrastructure gap (energy, water, telecommunications, roads) may be at the root of low potential growth and high inequality (Calderón and Servén, 2003).

What lessons can be drawn from the Latin America experience? A focus on Chile, Mexico and Peru.

Main and mobile lines, Power generating capacity and Roads and paved roads length
Source: Calderón and Servén (2003)
1. Infrastructure investment: basics

- Ways of investing in infrastructure
- Potential constrains

2. Some Latin American lessons

- Economy-wide requirements: dos
- Pension regulation: dos and don’ts
- On the benefits of gradualism

3. (1st and) Second generation pension reform
(1) **Primary vs. secondary market**, depending on whether investment finances the start-up phase.

(2) **Equity vs. debt finance**: investors may seek some equity participation or buy infrastructure bonds.

(3) Listed vs. unlisted companies.

(4) Direct vs. indirect investment.

(5) General partners vs. limited partners.

(6) Listed vs. unlisted funds.

(7) **Domestic vs. international**, due to preferences and/or regulatory constrains.

(8) Single sector vs. multi-sector.

**Despite being natural counterparts and the mutual benefits, the way to strengthen pension funds-infrastructure association is not straightforward.**
Potential constrains

(1) **General**

(1) Lack of confidence in long-term investment (low governance).
(2) Infra-development of basic infrastructure concession mechanisms.
(3) Lack of adequate financial instruments (structured products with recurrent income flows and solvency standards).

(2) **Pension regulation**

(1) Prohibitions (e.g. direct participation in infrastructures), quantitative restrictions (instruments and/or issuers) and rules on liquidity, valuation and ratings.
(2) Performance regulation (minimum returns).
(3) Switching of affiliates between fund administrators.

(3) **Technical**

(1) Risk#1: a higher participation in domestic infrastructures may raise the sovereign risk of the portfolio (due to investments abroad limits).
(2) Risk#2: pension funds may be already investing indirectly in infrastructure firms.

**A general-equilibrium approach to identify what binds is needed.**
1. Infrastructure investment: basics

- Ways of investing in infrastructure
- Potential constraints

2. Some Latin American lessons

- Economy-wide requirements: dos
- Pension regulation: dos and don’ts
- On the benefits of gradualism

3. (1st and) Second generation pension reform
Focusing on three cases: Chile, Mexico and Peru

Infrastructure investment over GDP in Chile, Mexico and Peru, around 2000

The role of the private sector in financing infrastructures is significant in Latin America, but at very low levels (except in Chile).

Source: World Bank, official sources and BBVA
Focusing on three cases: Chile, Mexico and Peru

Pension funds investment in infrastructure investment in Chile, 2008

Source: SAFP

Warning: lack of good comparable data

Pension funds in Mexico invest just around 1% of their portfolio in infrastructure firms vs. 2% in Peru and over 9% in Chile (6% in energy).
Economy-wide requirements: dos

Governance indicators in Chile, Mexico and Peru 2007

Pension systems work properly if the economy works fine (markets and institutions). This is especially the case in long-term projects, as infrastructures.
Some Latin American lessons: on dos and don’ts

**Economy-wide requirements: dos**

Infrastructure investment over GDP in Chile

(1) **1982.** (Almost) any public works can be under concession (Organic Law MOP, not applied).

(2) **1991.** Tender procedures are structured, as well as the contractual system for public-private-partnerships (Law n.19.068).

(3) **1993.** First tender (*El Melón* Tunnel), and additional legislative progress (Law n. 19.252).

(4) **1996.** Further reforms covering: tender regime, concession contracts and period, and third-party funders protection (Law 19.460).

(5) **1998.** Creation of the Infrastructure bond.

(6) **2008.** Concession cancelled due to bad-practice (maintenance and security, *Camino de la Madera* road).

The (long) Chilean experience in infrastructure public-private-partnerships and infrastructure concession legislation explains part of the success.

Source: World Bank
Some Latin American lessons: on dos and don’ts

Pension regulation: dos and don’ts

Some of the ‘regulations that hinder’ can be overcome with suitable financial instruments and markets: Chilean infrastructure bond. Still, some challenges remain.
Examples

(1) Chile

(1) On February 1998, Chile placed the first concession under the present value of minimum income mecanism: road from Santiago to Viña del Mar. Currently AFPs hold M.US$ 155,143 in bonds of the concessionary (Rutas del Pacífico).

(2) On 1998 after negotiations and delays, the first bid for the urban highway Costanera Norte failed due to higher projected costs for environmental reasons. On 1999, the bid was performed successfully, after the government established additional guarantees.

(2) Mexico

(1) On June 2008, five Siefors used for the first time Structured Notes in a private capital placement performed by Agropecuaria Santa Genoveva.

(2) A fragmented regulation and double taxation constrain the development of Real Estate Investment Trusts.

(3) Peru

(1) Successful experiences of greenfield projects financing: Trasvase Olmos (water treatment), IIRSA North and South roads (the South America initiative for regional infrastructure integration) and Transportadora de Gas del Perú (gas transportation). All of them had government warranties and were highly accepted by pension fund asset managers.

(2) Investment and promotion agencies had been working on a third road (Central IIRSA). Government is not offering guarantees, so the concession process may fail.
Some Latin American lessons: on dos and don’ts

Dos and don’ts

(1) Chile

(1) Good governance, concession schemes experience and suitable financial instruments (infrastructure bond).

(2) Challenges: inefficiencies in the concession system, treatment of switchers, observed herd-behaviour, and (still) some financial products needed.

(2) Mexico

(1) Gradual pension regulation progress, allowing indirect investment in infrastructure (bonds and ABS; *greenfield* investments are banned).

(2) Regulation limits the supply of infrastructure projects (private sector cannot participate in the energy sector by Constitution).

(3) Fragmented regulatory framework (decentralization), and Political vs. budgetary cycles.

(3) Peru

(1) Pension regulation progress (2001 reform), and (occasional) government support.

(2) Delays and inefficiencies in concession contracts.

(3) Under-development of financial markets: lack of adequate instruments, plus high exposure to sovereign risk.
Some Latin American lessons: on dos and don’ts

On the benefits of gradualism and country-specific approaches

Portfolio regulation should evolve gradually, in line with the other pension and economic institutions (‘one-size-fits-all’ nor ‘leapfrogging’ seem optimal, Melguizo and Vial, 2008). Capital markets are key.
Reforms should not be limited to portfolios

(1) **Coverage.** Mandatory and/or opt-out schemes for independents and informal workers.

(2) **Solidarity pillar.** Relaxation of eligibility criteria vs. (dis)incentives.

(3) **Contribution rates.** Evaluation of rates and taxable income.

(4) **Disability and survivors benefits.** DB vs. DC benefits, and administrative control.

(5) **Competition, fees and financial knowledge.**

The on-going Chilean pension reform follows a general equilibrium approach. After all, the goal is to promote “adequate, affordable, sustainable and robust pensions” (Holzmann and Hinz, 2005).
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