

Lessons from the Chilean PPP experience

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Prepared for the International Growth Centre Conference in Rwanda, February 17, 2011.



A Research Partnership

Joint work with

- Eduardo Engel (Yale)
- Alexander Galetovic (U. de los Andes)

They are not responsible for this presentation, however.

Based on the Chilean case, using international experience for perspective.



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Introduction to Chile

Chile is a high middle income country, with solid institutions.

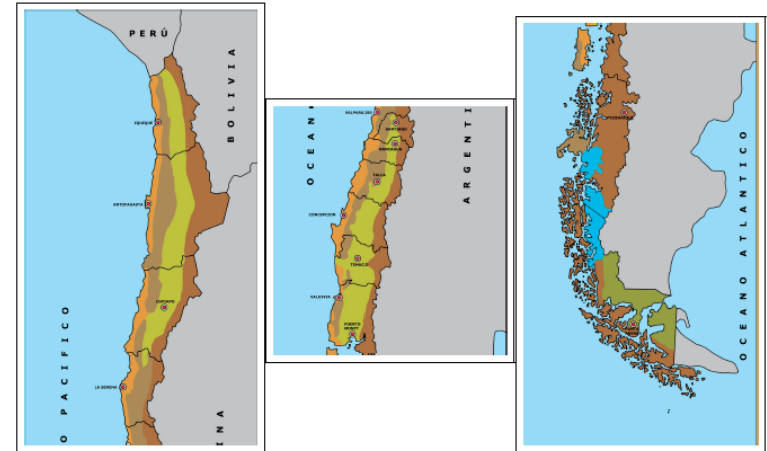
Isolated by geography, only 8% of country arable.

Little state intervention in the economy, but with system of means-tested subsidies.

Electric, telecoms and sanitary sectors private or almost.

Exports natural resources and services.

An effective PPP program in highways/airports/seaports.



Some comparisons

Name of variable	France	Chile	Rwanda
Literacy rate %	100	99	70
Enrollment tertiary ed. %	55	52	4
PPP GDP capita (US\$)	33,678	14,939	1,148
Exports % of GDP	23	38	9
Urban population % (2005)	76.7	87.6	17.5
Rural access to improved water %	100	75	63
Cars per 1000	498	103	2
Corruption Index	25	21	66

Source: WDR.



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Chilean infrastructure before 1990



History of PPPs in Chile

Seaport PPP law is separate (1997): 10 PPPs in main seaports. Very successful, additional PPPs soon, due to foreseeable congestion. **Will not talk about it.**

First (non-seaport) PPP law, 1991, one project (El Melón Tunnel).

In 1996 second law, led to 26 highway PPPs, 10 airports and 14 other projects.

Highways and airports, in most cases successful. Other projects: prisons, hospitals, etc, not successful.



Table: Main characteristics of the Chilean PPP system in 2007 (UF)

	Total Investment	Fraction of total	Number of projects	Fraction of total	Average length of franchise
Ruta 5	92.430.167	0,33	8	0,16	23,8
Interurban highways	63.404.831	0,22	13	0,26	27,7
Urban highways	93.902.535	0,33	5	0,10	31,6
Highways	249.737.533	0,88	26	0,52	27,3
Airports	10.000.162	0,04	10	0,20	13,1
Jails	10.076.609	0,04	3	0,06	22,5
Reservoirs	4.544.673	0,02	2	0,04	27,5
Transantiago	5.530.363	0,02	5	0,10	15,8
Public Infrastructure	4.267.235	0,02	4	0,08	23,2
Other concessions	34.419.042	0,12	24	0,48	18,8
Total or average	284.156.575	1	50	1	22,7

Source: EFGH 2008. Note: Currently, 1UF=US\$ 43.



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PPPs around Concepción



An urban highway PPP in Santiago



An urban highway PPP in Santiago



Main characteristics 1996 Law

PPPs awarded in simple, competitive auctions open to all firms.

Here: PVR auction: one number, equivalent to US\$342 MM

Present value of user fees.

Advantages

- Smaller demand risk
- Defines fair compensation.

REPÚBLICA DE CHILE
 MINISTERIO DE OBRAS PÚBLICAS
 ADMINISTRACIÓN DE OBRAS PÚBLICAS

CONCESION RUTA 140, TRAMO TRES PINOS
 -ACCESO NORTE A CORONEL-

ANEXO Nº 10 FORMULARIO DEL OFERTA ECONÓMICA
 IDENTIFICACION DEL LICITANTE O GRUPO LICITANTE:
 ACCIONA CONCESSIONES RUTA 140

Acosta el Abogado de Ingresos Mínimos Garantizados, según lo indicado en el artículo 1.213.3 de las Bases de Licitación.
 \$1
 (Cinco mil a 100)

TRAMO AL QUE POSTULA: (Completar CON A O B según el Tramo al que Postula)
 TRAMO: A

Factor de Licitación (Constante)

TRAMO	Valor de B.C.	Valor de S.
A	7.920.000 - U.F.	4 U.F. (Sera Calcular de Postulante)
B	11.000.000 U.F.	U.F.

Nota:
 1) FIC: Contratación al menor de los Regimen Tercero de la Cuantía que el Licitante o Grupo Licitante pueda obtener de la Concesión, calculado en valor presente, en U.F., con duración del mes a solicitar por el Licitante o Grupo Licitante no podrá ser mayor que U.F. 11.000.000 (once millones de Unidades de Fomento).
 2) Si Constatado a la fecha de Subscripción la construcción de las Obras que el Licitante o Grupo Licitante puede obtener de la Concesión, en U.F., son diferentes, el mes a solicitar por el Licitante o Grupo Licitante no podrá ser mayor que U.F. 25.000.000 (veinticinco millones de Unidades de Fomento).

Para efectos de la transacción de los ingresos por el cobro de U.F.V., según lo indicado en el artículo 1.213.3 de las Bases de Licitación, el Licitante o Grupo Licitante debe indicar por uno de los dos de los dos tipos de cobros, el cobro por el tipo de cobro que desea utilizar.
 Tipo Fijo Tipo Variable

Declaro que la presente Oferta ha sido elaborada de acuerdo a todas las condiciones, normas, bases, especificaciones, y que mi subscrito y quien suscribiere por el Missivo en Oblea FIDUCIARIA como es costumbre en esta materia.

Firma Autorizada para el Missivo: [Firma]
 Presidente Director General de Obras Públicas

FIC: [Firma]
 Presidente Director General de Obras Públicas

1) Normativa Regimen de Ingresos Mínimos Garantizados (1.213.3 de las Bases de Licitación)



Problems in the Chilean PPP program

Inappropriate bidding variable (non-PVR) implies need for subsidies and revenue guarantees.

Tendency to “build now, regulate later” (Mission of PPP unit is: “Generate infrastructure facilities for national development. . .”)

⇒ Lack of an independent regulatory framework.

Some projects may have skipped the social cost-benefit analysis through renegotiation.

Excessive renegotiations (24% of investment) and. . . .



New law (2010)

Limits the scope of renegotiations and arbitration.

Creates a high level PPP council.

Defines qualification process for firms (including previous history).

PPP contracted on a service quality basis, not on inputs.

Independent technical panel for contract disputes.

Defines compensations for acts of government.

Regulates and limits renegotiations, etc.



Lessons from Chile: Political economy

There is no free lunch: all projects use resources.



Lessons from Chile: Political economy

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The exception: using multilaterals to release credit constraints.

Organizational problems due to expansion of PWA.

Lobbying by foreign (with gov't support) and domestic firms.

Excessive contract renegotiation.

End of contract woes and insurance.



The big advantage of PPPs

Timely construction, smaller cost escalation (as with lump sum contracts?).

In the case of roads: **maintenance**. Always difficult in non-developed countries (even for the US).

In the case of other projects: bundling lowers life-cycle costs.

But complicated to manage and introduce budget rigidities.

Value for money: not a clear concept.



Prerequisites for success

1. Clear rules (specific legislation on PPPs)
2. Cost-benefit analysis of projects if they do not pay for themselves.
3. Projects in final form.
4. Transparency: information on project and modifications should be on web page.



Prerequisites for success II

5. Independent supervision and conflict resolution.
6. Only one principal.
7. PVR (plus subsidy, perhaps) if user fees.
8. If privatization is an option, use it and regulate (means-tested demand side subsidies also useful).



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PPPs and multilaterals in lower income countries

Low income countries suffer from lack of human and financial resources and low potential user fee revenues.

They have support from multilaterals which can help in first two issues.

Because PPPs have some advantages:

- Bundling reduces life cycle costs.
- Higher on time and on cost completion rates.
- If user fees, empower users, pressure on service quality.



Proposal II

1. Private sponsor forms SPV, equity equal to 20-30% of project (to have skin in the game).
2. Rest of initial finance from multilateral and international private banks.
3. Project is paid with availability payments (from gov't and from grants), plus revenue from user fees.
4. After construction, project issues bonds backed by availability payments and user fee revenues. Multilateral buys a chunk of the bonds to provide backing and reputation.

Note: User fees should be low enough that they do not exclude users, but high enough that they are empowered.



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Conclusions

PPPs are powerful mechanisms to provide infrastructure, but dangerous.

They do not provide additional resources, but may help employ them more effectively.

Dangers are: excessive renegotiations, corruption, use for political advantage.

Proposal leverages contribution of multilaterals to achieve advantages of PPPs.

