

# Private Participation and Economic Regulation of Airports in Latin America

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# Agenda



Overview: Private Participation in Latin America



PPPs, private companies, airport systems and revenue-sharing clauses



Laws, contracts, regulatory agencies and economic regulation



Conclusions

# Introduction

## **PPPs**

- Necessity of expansion of airport infrastructure (ACI, IATA)
- Many factors for the correct choice (ACI, 2018)
- 60% of PAX in LA - > private participation

## **Economic Regulation**

- Aims to mimic the conditions under competitive markets
- All private airports are subject to econ. Regulation

Literature is missing on combined analysis

# Objectives of research

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it describes private participation in the airport sector in the LA region and identifies features that should be considered for efficiency and market power assessments;

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it identifies the types of economic regulation in LA airports and their possible unwanted effects

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it presents an overview of alternatives to existing type of regulations and discusses the pros and cons of these.

# Private participation in the LA airport sector

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Colombia : start 1996

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6 concessions:

4 airports + 2 sets of regional airports

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Two criteria:

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1: Lowest tariffs for users

2: Highest revenue share with gov't

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# Private participation in the LA airport sector

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Argentina : start 1998

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Concession with 33 airports (later other airports as well)

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Winning criterion: Highest annual concession fee

## **2006: Re-negotiation of the contract**

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1. Replaced concession fee with share of revenues

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2. Recognized losses due to regulatory decisions

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3. Gov't received 20% stakes

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4. New investment commitments

Private  
participation  
in the LA  
airport sector

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Mexico: start 1998 → three  
airport groups

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50-year concessions

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Winning criterion: The  
highest bid

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# Private participation in the LA airport sector

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Peru: start 2005

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→ Lima airport + 2 groups of regional airports

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Winning criteria for Lima: highest share of gross revenue

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Winning criteria for regional airports: the lowest payment by the government



Private  
participation  
in the LA  
airport sector

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Brazil: start 2011

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→ Ten largest airports in the  
country so far

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Winning criterion: Highest  
payment for concession rights

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Concession length: 20-30  
years

Private  
participation  
in the LA  
airport sector

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Chile: Santiago Airport in  
2015

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→ Several small airports as  
well, but information is very  
limited

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20-year concession contract to  
AdP

## Types of Concessions

Any efficiency implications due to type of PPP?

Table 1. Number of airports by type and country  
(concession contracts in parenthesis)

	Lease contract (LC)	Rehabilitate, operate and transfer (ROT)	Build, rehabilitate, operate and transfer (BROT)	Build, operate and transfer (BOT)	Total
Argentina		34 (2)	3 (3)		37 (5)
Brazil			9 (9)	1 (1)	10 (10)
Chile				1 (1)	1 (1)
Colombia	1 (1)		15 (5)		16 (6)
Mexico			35 (35)		35 (4)
Peru		12 (1)	7 (2)		19 (3)
	1 (1)	46 (3)	69 (54)	2 (2)	118 (60)

Source: Private Participation in Infrastructure Database and own research.

# Private Companies

- Market power assessment
- Single (Brazil) vs. group (elsewhere)
- Relevant type of regulation
- Revenue-sharing clauses

Table 2. Number of airports by concessionaire and country

(concession contracts in parenthesis)

company	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Total
Corporación América	34 (2)	2 (2)				6 (1)	42 (5)
OMA					13 (13)		13 (1)
GAP					12 (12)		12 (1)
ASUR					9 (9)		9 (1)
FRAPORT		2 (2)				1 (1)	3 (3)
INVEPAR		1 (1)					1 (1)
ODINSA				1 (1)			1 (1)
ADP			1 (1)*				1 (1)
CCR		1 (1)					1 (1)
VINCI		1 (1)					1 (1)
CHANGI		1 (1)					1 (1)
Others	3(3)	2 (2)		15 (5)	1 (1)	12 (1)	33 (17)
<b>Total</b>	<b>37 (5)</b>	<b>10 (10)</b>	<b>1 (1)</b>	<b>16 (6)</b>	<b>35 (35)</b>	<b>19 (3)</b>	<b>118 (60)</b>

Source: Private Participation in Infrastructure Database and own research.

\* VINCI is also part of the consortium that operates Santiago airport.

# Laws, contracts, regulatory agencies and economic regulation

- four dimensions of governance of airport regulators: the autonomy of the decision-making process, the transparency of the regulators' procedures, the accountability of the regulator and the quality of bureaucracy.
- the overall governance indicators of airport regulators in the region are well below the threshold of good governance
- trade-offs for regulators (economic regulation vs. administrative or safety)

# Laws, contracts, regulatory agencies and economic regulation

## Strict forms of regulation:

- 1) Rate of return,
- 2) price caps,
- 3) revenue caps and revenue sharing agreements
- 4) benchmarking and yardsticks.

## or

- LHR (light-handed)
- NAR (negotiate-arbitrate) (Arblaster and Hooper (2015))

The main differences between LHR and NAR are:

- 1) that the latter does not require rigorous information and institutional capacity required for interpreting and assessing information disclosed and
- 2) the threat of regulation under LHR implies strong institutional capabilities to impose penalties whereas under NAR it implies arbitrate capabilities.

## Types of Regulation

Table 3. Number of airports by economic regulation and country  
(concession contracts in parenthesis)

	Administrative regulation	Price cap - dual till	Price cap - single till	Rate of return	Total
Argentina				37 (4)	37 ( 4)
Brazil			10 (10)		10 (10)
Chile			1 (1)		1 ( 1)
Colombia				16 (6)	16 ( 6)
Mexico	1 (1)	34 (34)			35 (35)
Peru	18 (2)		1 (1)		19 ( 3)
	19 (3)	34 (34)	12 (12)	53 (10)	118 (60)

Source: Private Participation in Infrastructure Database and own research.

# Evaluation of regulation type in LA



lack of good governance and weak economic regulation



Moving away from RoR : inefficient choice of inputs , inefficient price structure (Forsyth et al., 2017)



Price cap? : more relevant for countries with strong institutional conditions



Guasch et al. (2008) found that concessions in water and transport sectors regulated by price caps proved consistently more fragile than rate of return regulation and led to a higher probability of renegotiation and a greater difficulty of contract enforcement



Heavy costs of price caps (trained staff, admin. Costs, asymmetric info)



# Conclusion

Table 4. Latin American hubs and dominant carries

Airport	Country	Dominant Carrier	Share of flights at Hub
MEX	Mexico	Aeromexico	46%
GRU	Brazil	LATAM Airlines Group	31%
BOG	Colombia	Avianca	58%
PTY	Panama	Copa Airlines	89%
LIM	Peru	LATAM Airlines Group	49%

Source: Megahubs International Index 2018, OAG.



Arblaster and Hooper (2015): negotiate-arbitrate regulation (NAR), or a variant of it, could be an option for airports in Less Developed Countries



The benefits of NAR could not be reached if NAR is applied to airports where the aviation markets are not competitive due to the risk of collusive vertical relations.



In LA: the current market concentration is high, but there is wave of expansion of LCCs → NAR feasible



For the rest: price-cap as a second-best



strengthening institutional, financial and legal capabilities are necessary conditions for effective price cap regulation in order to monitor and to assess performance.

# Thank you!

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