Case Studies on Transport Policy 4 (2016) 178–187

Contents lists available at ScienceDirect

Case Studies on Transport Policy

journal homepage: www.elsevier.com/locate/cstp

Megaports' concessions
The *Puerto de Gran Escala* in Chile as a case study

José Luis Guasch [a,b,c], Ancor Suárez-Alemán [d,*], Lourdes Trujillo [d,1]

[a] University of California San Diego, United States
[b] World Bank Global Expert Team on PPP, United States
[c] The Growth Dialogue, George Washington University, Washington, DC, United States
[d] Economics of Infrastructure and Transport Research Group, University of Las Palmas de Gran Canaria, Spain

ARTICLE INFO

Article history:
Available online 19 February 2015

Keywords:
Port concessions
Large infrastructure
Chilean ports

ABSTRACT

Chile has a successful track record of introducing private finance in infrastructure investments (including ports) through concession contracts. However, under the current concession scheme, there is a high degree of risk associated with very large civil engineering works involved, such as building breakwaters for mega-port initiatives. In this paper we analyse the *Puerto de Gran Escala* (*PGE*) as a case study in the framework of private participation in mega-ports. Here we address a number of issues relevant to the implementation of this mega-port in Chile in order to take lessons for similar projects in the future. Our paper attempts to shed some light on issues such as the followings: should the concession model be modified and/or should we consider underwriting this risk or finance the breakwaters by the public sector? What type of concession should be granted? How should the tendering of terminals be structured to secure the desired level of competition? The main objective is to identify the specificities that mega-projects introduce in traditional concession models and tendering processes, together with their structures and financial implications.

1. Introduction

The inclusion of private participation in the infrastructure sector has been traditionally regarded as a way to improve efficiency, productivity and service quality (Andres et al., 2007; Trujillo and Gonzalez, 2011). In addition, private participation in transport infrastructure has proved to be a quite adequate vehicle in facilitating their development in recent years; where the public sector has been benefited in terms of meeting the need for finance and risk reduction, as well as taking advantage of the private sector's skills in managing efficiency (Cabrera et al., 2015). As Hoffman (2001) states, the demand for private sector participation highly depends on the desire of the public sector to promote foreign trade and the need to reduce its fiscal burden.

However, from a welfare maximisation perspective, privatisation processes are not given the necessary attention they require. Societies perceive privatisation as if the new owner would achieve full discretion in decisions about the acquired public goods. In fact, if there were no contracts and contractual obligations that could even be true. Thus, the establishment of a proper regulatory framework for concessions is a major issue.

Frequently, the negative public opinion on privatisations stems from failures in their implementation. The lack of transparency or an inadequate communication with the public might be some other reasons explaining the current unfavourable stance of the public. Accordingly, as noted before, privatisation in some sectors requires proper economic regulation. The success of privatisations is highly dependent on the ability of governments to control private concessions. Finally, the possibility to renegotiate the initial terms or conditions in case it appears necessary is another important factor at play, which influences the public perception of privatisations (Guasch, 2006).

Even in cases where the concessionaries earned huge profits, some customers and workers were left at a disadvantage. In some occasions they did not receive any efficiency gains from the process

* Corresponding author. Tel.: +34 928458190; fax: +34 928458183.
E-mail addresses: guaschjl@gmail.com (J.L. Guasch), ancorsuarez@gmail.com (A. Suárez-Alemán), lourdes.trujillo@ulpgc.es (L. Trujillo).
[1] Tel.: +34 928451809; fax: +34 928458183.

http://dx.doi.org/10.1016/j.cstp.2015.02.003
2213-624X/

and, in some others, they even suffered from adverse employment regulations and wage cuts. For example, in countries such as UK or New Zealand, port reform has been used as an instrument to de-unionize the industry and subdue militant dock labour (Turnbull and Wass, 2007). Commonly, privatisations are seen as a trade-off between efficiency and social objectives: those in favour stress that it increases operational efficiency and innovation, and those opposed emphasise its capacity to abuse consumers and/or employees and its tendency to hurt the environment (Cullinane and Song, 2002). Therefore, setting up a proper regulatory framework for privatisations is of critical importance, both *ex-ante* (by designing correct contracts; negotiation or auctions) and *ex-post* (renegotiations).

Chile has a successful track record of introducing private finance in infrastructure investments (including ports) through concession contracts (Estache and Trujillo, 2004). However, under the current concession schemes, there is a high degree of risk associated with very large civil engineering works involved in building breakwaters for this mega-port initiative. How to finance this infrastructure becomes crucial, especially in an industry that lacks of a proper competitive environment to determine it. Since public sector main goal is not to maximise profits, there is an urgent need in defining the optimal funding scheme ex ante, on the basis of a proper policy analysis. This paper analyses the Large Scale Port in Chile as a case study for privatisation in large infrastructures. After revisiting the literature on port reform and the inclusion of private participation in the port sector, here we to shed some light on issues such as the followings: should the concession model be modified and/or should we consider underwriting this risk or finance the breakwaters by the public sector? What type of concession should be granted? How should the tendering of terminals be structured to secure the desired level of competition? The main objective is to identify the specificities that mega-projects introduce in traditional concession models and tendering processes, together with their structures and financial implications.

This paper first looks briefly at an overview of the private participation in the port industry worldwide and the port sector in Chile. After that we address the *Puerto de Gran Escala* (*PGE*) case as an example of a mega-port project in the country, in Section 4. We go through the introduction of private participation and its financing implications in the PGE in Section 5. Section 6 offers some thoughts on the most desirable structure and financing for such as mega projects. Finally, some conclusions are derived from the case study that may be helpful under similar circumstances.

2. A brief on private participation in the port industry

Infrastructure services – mainly electricity, water, sanitation, telecommunications and transport – are vital for modern economies. Sole public provision of those services has resulted in limited coverage, high investment requirements and lower efficiency and quality levels. As such, the introduction of private participation in those infrastructures became crucial (Guasch, 2004; Cabrera et al., 2015).

Private participation may adopt different structures, depending on factors such as, among others, ownership, risks, benefits, responsibility and service delivery. Traditionally, the UK has taken the leading role in terms of privatisation processes (particularly in the port sector). The total revenue produced from all UK privatisations in the last two decades amounted to more than USD 121 billion and, considering all Europe, the total increased up to USD 641 billion (Baird and Valentine, 2007). Authors noted that port privatisation in the UK was never about developing new and improved port infrastructure and facilities to benefit the economy, which was the aim in other countries; it was simply a mechanism used to remove port assets from public ownership.

Along the same line, Cullinane and Song (2002) emphasised that privatisation provided only a partial cure for the ails of the port industry. Authors also pointed out that the entire port system has to be flexible enough to allow modifications in response to a changing business environment. Brooks (2004), based on the work of Saundry and Turnbull (1997), commented that although "privatisation did not transform the financial and economic performance of UK trust ports sufficiently to justify the private gains of port management shareholders, and represented a "huge public loss", it is not clear if the outcome would have been better if the UK government had provided greater regulatory oversight post-privatisation".

Latin America has proved to be a suitable case to analyse privatisation processes. According to The World Bank data, this region accounts for the largest investment share in ports worldwide, 31%.[2] As Guasch et al. (2008) noted, the Latin American and Caribbean countries have taken the lead in allowing private sector participation in the provision of infrastructure services. Thus, the literature on Latin America privatisations processes is vast (Delfino and Casarin, 2003; Barja et al., 2004; Paredes, 2003; Torero and Pasco-Font, 2003; Ennis and Pinto, 2003; Resende and Facanha, 2002; Mueller, 2001; Engel et al., 2000, among many others).

From the first steps in Chile in the 1980s, the region has experienced a wave of privatisations in sectors such as petrol, gas, agriculture and public services, among others (Estache and Trujillo, 2004). This process of privatisations was in full swing especially in the 1990s, with the adoption of the price cap regulatory model. As Estache et al. (2004) noted "the infrastructure reforms of the 1990s consisted essentially of vertical and horizontal unbundling of the sectors into multiple business units – when allowed by country size – and "privatisation" of as many as possible of these business units".

Table 1 shows the predominance of Latin America and the Caribbean in the private participation in infrastructure, especially in greenfield projects and port concessions. The proceeds from the large scale privatisations in the 1990s reached 6% of the GPD in 18 Latin-American countries (IDB, 2002). In most cases, efficiency gains have been secured and users have seen improvement in the quality and access to the service. The effect on prices has been mixed to some extent due to the initial (prior to private sector participation) price distortions (Estache and Trujillo, 2004).

Yet that has changed since the late 1900s, when pragmatism (due to the need to improve public services) trumped ideology (Estache and Trujillo, 2004). Stressing the Latin America case, Estache et al. (2003) also noted that privatisation without competition generated few benefits for the economies, showing that price caps alone would not do much for users. As Hoffman (2001) showed, after the private participation process, there is less public involvement in port planning, investment and regulation in Latin America than in Europe. However, the public sector has a role to play concerning the monitoring of anti-competitive behaviour and the provision of a legal and regulatory framework, among other functions. The success of privatisations is highly dependent on how they are established according to terms and conditions and, specially, how they are implemented and regulated.

3. An overview of the Chilean port reform

In 1978, seaports in Chile were characterised by the split of cargo handling between two different groups of workers. Specialised port workers performed stevedoring operations, while *Emporchi* employees did operations of loading/unloading. Both groups enjoyed some monopolistic positions. On the one hand, stevedores had strong limitations to the growth of their numbers, as each worker was required to have some special license

[2] http://ppi.worldbank.org/.