
“When politics and lobbying combine to promote white elephants by using PPPs”

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Abstract

Theoretical insights into the cooperation between public and private partners (PPPs) suggest that they can be an effective tool for preventing ‘white elephant’ type projects. However, various case studies have shown that this belief is largely dependent on the effective transfer of operational risk to the private partner, and on the application of user-pay funding. This paper goes one step further and explores the idea that private partners that participate in PPPs with no substantial risk transfer – and under heavily subsidized schemes – can act as lobbies, exerting pressure to develop white elephants.

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Keywords: PPP; political favoritism; infrastructure;

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1 Introduction

White elephants are considered sacred in Thailand and, as such, cannot be put to work like other elephants despite the high cost of their maintenance. From here, the figurative use of the term ‘white elephant’ to designate a facility with very little activity and high maintenance costs. The first documented use can be traced to the *Illustrated Times* (London) of 1863 (Tréguer, 2017) in a reference to the Drury Lane Theatre. Ten years later, the *New York Times* corroborated this usage (Bullen, 2001), and explained that the kings of Siam used to give a white elephant to those courtiers that had fallen into disgrace, given that maintaining the gift would have the effect of ruining the receiver. This story has, however, been denied by Thai historians.¹ Are white elephants, in practice, useless elements that are expensive to keep? Or are they a sign of possession conferring authority and legitimacy on their owner? Or are they simultaneously both things, according to different traditions of governance? Perhaps the best interpretation was provided by Mariano Rajoy, Prime Minister of Spain from December 2011 to June 2018. In an interview on Spanish TV (Salvados, *SextaTV*, April 4, 2016), Mr. Rajoy boasted that “We have good trains and freeways”. When the interviewer interrupted him by saying “But empty”, Mr. Rajoy responded “Yes, empty, but we have them”. Indeed, two traditions in one. Little wonder that Spain stands very high - if not first - in the ranking of countries in which white elephants have been promoted and implemented by different governments of different ideological orientation (Bel, 2010; Albalade, Bel, and Fageda, 2015; Bel, Bel-Piñana, and Rosell, 2017; Rodríguez-Pose, Crescenci, and Casaldo, 2018).

¹ For example, Ringis (1996) claims that a Siamese king would never give away a white elephant because, far from considering it a burden, he would have seen it as a sign of virtue, a possession that conferred on him authority and legitimacy.

In the field of the social sciences, a ‘white elephant’ has been defined by Robinson and Torvik (2005) as an investment project that has a negative social outcome, and one that represents a special form of inefficient redistribution. Such projects are politically attractive when politicians find it difficult to make credible promises to their supporters. In fact, it is the very inefficiency of these projects that makes them attractive politically, an interpretation that is gaining increasing attention in the economics literature (i.e. Ganuza and Llobet, 2018)

Although public-private partnerships (PPPs) have long been seen as a filter for white elephants, warnings regarding the strict conditions for this filter to work have been increasingly voiced in the literature. For example, Engel, Fischer, and Galetovic (2011:16) warn that “PPPs will not filter such projects out if they are financed with subsidies or if there is an implicit guarantee that the government will bail out a troubled concessionaire” (see also Iossa and Martimort, 2013:208). In this regard, Bel, Bel-Piñaña, and Rosell (2017) actually show that Spanish governments have used PPPs to promote white elephants, using them to avoid short-term budgetary restrictions. The authors show that governments provide wide guarantees in case of concession failure, and illustrate the mechanism employed in cases involving toll motorways, high-speed rail lines and natural gas storage facilities. Several studies for other countries have shown how PPPs have been primarily used for financial motivations, and have frequently delivered unsatisfactory results: for instance, Shaoul, Stafford and Stapleton (2006, 2010) for the United Kingdom, and Reeves (2013, 2015) for Ireland.

While papers studying financial motivations and disappointing results are increasingly available in the literature, there is lack of in-depth analysis on how and why political processes and lobbying combine to promote wrong projects. In this paper, we contribute to the literature by showing that private partners in PPPs can actually lobby governments and the media to promote white elephants. Indeed, this is merely a logical consequence of PPPs not

being able to filter out white elephants. If PPPs are financed with subsidies and/or the government provides a bail-out guarantee in case of trouble, obtaining such contracts can only yield profits.

We illustrate this claim by undertaking a study of the light rail (or fast tram) project implemented in the city of Barcelona. Barcelona's light rail system is arguably the infrastructure project that has generated most technical studies and attracted most media coverage in the metropolitan area in recent decades. It arouses considerable feelings both in favor and against its implementation, while confronting substantially different ideological views on just how the city should address the mobility challenges it faces. It is a project that has mobilized all major interest groups concerned with lobbying for a specific future vision of urban mobility and for transport investment decisions that favor their interests, while at the same time it holds up a mirror to all the dysfunctions that characterize policy evaluation and the decision-making process.

The remainder of the paper is organized as follows. Next, we briefly review the literature on institutional PPPs, the organizational form taken by the public private partnership of Barcelona's light rail system. We then document the context and implementation of the systems first lines. Following on from that, we analyze the planning of the 'connection project' (*Tram-Diagonal*) to link up these lines, and discuss the roles, incentives and actions of the relevant actors in this process. Finally, we draw our main conclusions and policy implications.

2 Institutional PPPs. Related literature

There is much scholarly debate as to whether a collaborative partnership between the government and private actors can be considered a PPP or not. For instance, in the domain of industrial organization the bundling of construction and operation phases and a substantial risk transfer to the private partner are quite frequent (see Albalade, Bel, and Geddes, 2017).

One of the problems with applying a narrow definition is, for instance, that countries such as Spain would appear as not having recorded a single PPP since 1965, when the legislation instituted state financial liability for all concessions awarded (see, Albalade et al., 2016). Clearly, daily business in the real world cannot be fitted to such narrow definitions; nor can that of the European Union, which distinguishes three types of PPP: contract PPPs, concession PPPs, and institutional PPPs (European Commission, 2004). The latter include the shared public-private ownership of an organization or asset, with government and private partners each holding shares (Petersen, 2010).²

Institutional PPPs used to be referred to as partial privatizations,³ and continue to be referred to in this way (Bel and Fageda, 2010; Albalade, Bel, and Fageda, 2013). Such partnerships operate via mixed firms, partly government and partly privately owned, which operate under commercial law. As such, these firms lie outside the purely public/purely private dichotomy.⁴ In contrast to the contracts and concessions awarded to private firms, in mixed firms governments retain property rights over the company, so that they can exert ownership control (besides the control exerted by means of regulatory tools). Matsumura (1998) and Matsumura and Kanda (2005) stress that when a mixed company is under

² Recall that institutional PPPs can also appear as public partnership joint ventures (PPJV) in British scholarly studies (i.e. Andrews, Esteve and Ysa, 2014).

³ Indeed, collaborative agreements referred to today as PPPs have been conducted for many centuries (see Hodge and Greve, 2007)

⁴ It is worth noting that mixed delivery in the US differs in nature. In these mixed public-private arrangements, both pure private firms and pure public units produce the service within a single jurisdiction (Warner and Bel, 2008). Mixed delivery is also found in Europe, but to a much more limited degree than in the US, and it is not comparable to the partially privatized firms that are more frequent in Europe.

effective government control, its managers are expected to pay more attention to the government's objectives and less to profit maximization. In a similar vein, mixed firms can provide a more adequate combination of incentives for cost reduction and quality enhancement compared to purely public and purely private firms (Schmitz, 2000).

A few multivariate empirical studies have analyzed the factors influencing the creation of mixed firms, and, as with full privatization, financial constraints appear to be of primary relevance (Albalade and Fageda, 2010; Albalade, Bel, and Fageda, 2014). The available evidence on the comparative performance of mixed firms though is scant. In their seminal study, Boardman and Vining (1989:26) found that "partial privatization may be worse, especially in terms of profitability, than complete privatization or continued state ownership". In a more recent study, Boggio (2016) reported that mixed firms in Italy are less profitable, but more technically efficient, than their public counterparts.⁵ While available evidence is still scarce, there seem to be some grounds to arguments that mixed firms actually combine the worst incentives of public and private ownership – rather than the best, as suggested in Eckel and Vining (1985), and more recently – and with specific reference to institutional PPPs by Da Cruz and Marques (2012) and Andrews, Esteve, and Ysa (2014).

Somewhat surprisingly, research on PPPs has paid little attention to issues related to political favoritism and the exploitation of political connections, perhaps because there is a belief that PPPs limit informal lobby activities, given that private parties are expected to bear the project risk (Koppenjam 2008). This view might be rooted in the idea that all PPPs involve substantial risk transfers to the private actor. However, the latter can lobby the government, for instance, to reduce the amount of risk transferred. More generally, awarding contracts or concessions to private actors is an area in which rent seeking can take place

⁵ Note that while Boardman and Vining (1989) study deals with all type of firms, Boggio (2016) deals with firms delivering local public services.

because, according to Hart, Shleifer, and Vishny (1997), corruption and related rent-seeking forms are more closely related to the private production of services, while public production is more strongly associated with overemployment. Several practices might promote political connections and favoritism in the design and award of contracts and concessions, such as the ‘revolving doors’ between politics and big business, a fairly common phenomenon in Spain, as documented by Castell and Trillas (2013), whereby politicians holding high office are subsequently appointed to executive positions in large firms with government dealings (whether contractual or regulatory), after they have left their institutional political activities. In fact, Albalade et al. (2017) present evidence of favoritism and the exploitation of political connections in the awarding of urban water contracts in Spain. This practice is of particular interest in our research, because in institutional PPPs private partners bear a much more limited degree of risk than in other types of PPP.

3 Barcelona’s tramway: Context and building of first lines

The reintroduction of a modern light rail system, following the suppression of its predecessor in the 1970s (to provide more space for cars), can be traced to the end of the ‘80s, when it emerged as a cheap option (compared to that of extending the underground) precisely for alleviating the growing congestion caused by an excessive dependence on the motor vehicle. It was first mentioned in the strategic plan of the *Transport Metropolitans de Barcelona* (TMB) and in studies for its implementation in the Diagonal-Baix Llobregat corridor (today known as *Trambaix*) drawn up by the now extinct *Entitat Metropolitana del Transport* (EMT). At the beginning of the 90s, various studies were conducted that were integrated into a previous version of the Intermodal Transport Plan for Barcelona (PIT), which was never to gain official approval. Yet, despite this, in 1997 the Barcelona City Council and EMT launched a pilot project for the construction of 600 meters of light rail infrastructure along the

Diagonal Avenue (between Maria Cristina and Francesc Macià) in order to test various vehicle units developed by different rolling stock companies.

In that same year, studies for the extension of this new light rail network from Francesc Macià to Sant Adrià del Besòs and Badalona (today known as *Trambesòs*) were made and the project was awarded to the same group.⁶ The merger between the two mercantile corporations which, in fact, included the same group of companies, resulted in the creation of TRAM. Below, we report details regarding the shareholding structure of this firm.

Subsequently, both light rail networks were included in the Public Transport Infrastructure Plan (PDI) for 2001-2010 conducted by the *Autoritat del Transport Metropolità* (ATM), approved in April 2002.⁷ The *Trambaix* (AX12a) was incorporated within the construction process initiated in 2001, while *Trambesòs* and the connection between both networks along the Diagonal Avenue (AX12b) formed part of the public tendering process already initiated by that date and the construction of which was initiated in 2003. This and the fact that the criteria for its inclusion in the plan were not conditional on any socioeconomic impact evaluation (as stated by the ATM, 2009:87) highlights the instrumental use made of policy evaluation and the fact that it was perceived as a superfluous element in the planning process. It should also be stressed that no socioeconomic impact evaluation was included for the two interventions in the 2001-2010 PDI, while all other proposed interventions included their corresponding evaluation. The procedures adopted serve to reinforce the idea that planning

⁶ Interested readers can consult both the *Trambaix* and *Trambesòs* contracts at the following links (<http://www.tram.cat/content/pdf/atm-tramviametropolitana-sa-text-refos.pdf>) (<http://www.tram.cat/content/pdf/atmtramvia-metropolitana-del-besos-sa-text-refos.pdf>).

⁷ https://doc.atm.cat/ca/dir_pdi/PDI200110_juliol2009/files/assets/basic-html/page-1.html

instruments may, on occasions, be used simply to formalize predetermined political decisions.⁸

The political debate at that time records that the building of the light rail system in the Baix Llobregat area was born out of the refusal to extend the Metro (subway) to municipalities neighboring Barcelona because of the high costs and lower levels of demand. Specifically, the 2001-2010 PDI justified the introduction of light rail on the grounds that Barcelona's metropolitan area required a new transportation mode that offered a capacity somewhere between that of the subway and the bus lines, in order to structure the territory and to provide higher transit supply levels in corridors along which standard buses were deemed insufficient. In short, a complete disregard was shown for any operational or prioritizing interventions before investing in the transport infrastructure.

During the corresponding construction works, a number of contingencies emerged that resulted in project modifications and complementary works that caused the total investment to rise to a total of 300.4M€ for *Trambaix* and 264.5M€ for *Trambesòs* – that is, cost overruns of 38 and 32%, respectively. The ex-post socioeconomic impact evaluations conducted for the new infrastructure plan (PDI 2011-2020) assigned an internal rate of return (IRR) of 11.9% to *Trambaix* and 0.2% to *Trambesòs*, based on a simplified cost-benefit analysis method that failed to include all relevant social costs correctly.⁹ The fact that this evaluation also failed to

⁸ To the best of our knowledge only *Trambesòs* included some sort of evaluation as part of study entitled “*Projecte de traçat del tramvia Glòries – Besòs. Estació del Nord / Vila Olímpica – Glòries – Fòrum 2004 – Sant Adrià de Besòs /Badalona*”, conducted by SENER in 2001. This study assigned the project an internal rate of return of 4.5%, which highlights the risk associated with the intervention should deviations in inputs or the initial hypothesis occur.

⁹ See https://doc.atm.cat/ca/dir_pdi/PDI201120_pdi_novembre2013/files/assets/basic-html/index.html#1

include ex-ante figures for purposes of comparison, as it did for other interventions implemented under PDI 2001-2010, adds further weight to the conclusion that the decision-making process lacked adequate policy evaluation.

Both *Trambaix* and *Trambesòs* began operating in 2004 while the connection along the Diagonal Avenue was proposed in PDI 2001-2010 together with various extensions out into the city outskirts, proposed in PDI 2011-2020.

4 The Connection project (*Tram-Diagonal*): planning process

In 2005, a cost-effectiveness study of the connection of the two networks along the Diagonal Avenue was presented by an NGO (*Plataforma pel Transport Públic – PTP*) devoted to the defense of public transport. This self-denominated public transit lobby, which had supported the implementation of the light rail network from the outset, actively engaged with civic actors, policymakers and institutional representatives in its promotion.

In 2008, different public bodies, in the face of opposition from groups of Barcelona residents and commercial associations, reactivated the connection project by conducting studies to determine an alternative route to that of the Diagonal. In 2009, the City Council (led by the Socialist Party of Catalonia-PSC) initiated a participative process culminating in a referendum the following year to determine the preferred solution. The referendum included different street layout configurations: (a) a *rambla*, (b) a boulevard or (c) neither of the two, where options ‘a’ and ‘b’ implicitly associated the implementation of the light rail with a specific configuration, while option ‘c’ made no such explicit reference. Option ‘c’ received almost 80% of the votes (with a little less than a 12% turnout), in what was a resounding defeat for the city government, who had actively sponsored the connection project.

After the referendum, many more studies for a possible connection were undertaken, each of them involving an analysis of the socioeconomic impact of the light rail intervention. These procedures served to highlight just how dysfunctional policy formation was in this case, with

the policy evaluation being conducted after the planning and the public debate acting merely as a support to promote a given political agenda.

Table 1 summarizes the main inputs and results of the various studies undertaken. It also names the entity that commissioned the study and its authors. It should be stressed that all these studies shared both the inputs and demand modeling methodologies provided by ATM. Discrepancies in the findings result from different assumptions and the specific reference values applied. By way of example, all the evaluations disregard the potential increase in traffic congestion resulting from the allocation of road lanes to the light rail system.

Table 1. Summary of the cost-benefit analysis studies for the connection of Trambaix and Trambesòs.

Study	Investment (M€)	Demand (pax/day)	Demand shift (cars)	Travel time savings (h/day)	IRRs (%)	Author
TRAM (2011)	175.8	140,000	3,780	9,678	17%	MCRIT
ATM (2013) – PDI	168.1	190,000	10,800	9,585	44%	own
ATM-DTES (2012/14) (central s/c.bus)	142.3	177,857	13,318	8,570	56%	IDOM TYPASA
(lateral)	181.8	213,216	13,318	8,570	47%	
Aj.BCN (2016) Preliminary study	175.0	222,000	12,500	3,416	11%	MCRIT
ATM-BIMSA (2017). Informative Study	414.1	227,394	12,475	5,552	10%	GPO SENER TYPASA

Source: Only studies made by the public administration and by concessionaires are included.

In 2015, with a new municipal government in office, led by *Barcelona en Comú* (BenC, post-communist left), the City Council resumed the project to connect both light rail networks (*Trambaix* and *Trambesòs*), with the Diagonal Avenue as its preferred route. The first step in this new procedure was to commission twelve new studies of different dimensions of the project: including, transit demand modeling (IDOM–ATM), a traffic assignment model (DOYMO), an environmental impact study (BR) and a socioeconomic impact evaluation (MCRIT). All these studies went under the general heading of ‘Prior Study’, representing the first official project milestone in the process from planning to execution. To coordinate this work, the Council appointed a specific team led by the Coordinator of the Tramway Network Connection Project (TNCP). Later in 2016, the City Council signed a cooperation protocol with the Regional Government for the development of the light rail network connection. The

City Council also appointed a Strategic Director of TNCP to head up dialog and coordination between the different public administration bodies (including the aforementioned government bodies and respective public entities, such as ATM and TMB).

The cooperation protocol led to an agreement between ATM and the City Council to commission an ‘informative study’ of the connection, a legal requirement prior to initiating any construction project. The informative study included an analysis of different layout proposals and their corresponding socioeconomic impact evaluations in order to help decision-makers identify the best alternative. The study was undertaken by a group of companies that included GPO, SENER and TYPESA, and which had participated in studies in previous planning stages. The informative study relied fully on data from preliminary studies as inputs for its socioeconomic impact evaluation, and reported quite similar findings since only slight changes were made to the original hypothesis.¹⁰ The study was made public in June 2017 and a period was initiated for the public to raise any objections, while the Council awaited approval from the Regional Government with regard to its environmental impact evaluation. In that period, a review of the study’s socioeconomic impact evaluation was made public (see Albalade & Gragera, 2017). This revealed a number of significant methodological flaws and manipulations of the input data that seriously compromised the validity of the study’s welfare impact evaluations.¹¹ These were the outcome of a peer-review process of

¹⁰ Interestingly, investment costs doubled as did the saving in transit users’ travel times. No major changes were made in the light rail layout or in its operational services.

¹¹ It should be highlighted that the study’s authors needed the support of a political party opposed to the connection in order to have access to all the inputs used in the prior studies via the Public Information Access Commission. Some of the main criticisms raised were: (1) it only considered layout options and disregarded any potential improvements in the bus network’s operational management (even the transit demand model showed that increasing the commercial speed could yield

studies conducted in 2016 by various academics and commissioned by the Economics Department of the Regional Government. They had later been submitted to ATM and DTES at the end of that same year before the informative project was concluded. Those criticisms would later constitute formal objections to the informative study raised during the public information process by the political parties and civil sector organizations, but all objections were dismissed, and no changes were made.

5 The connection project: relevant players, incentives and actions

The construction of Barcelona's light rail network was promoted by the Catalan Regional Government in the late 1990s, led by the political party *Convergència Democràtica de Catalunya* (CDC). Two figures played an important role here: Mr. Pere Macias (CDC) regional minister for Public Works and Transportation during the period of project promotion, and his successor Mr. Felip Puig (CDC), regional minister during the period in which most of the construction work was completed (2001-2003).

Tramvia Metropolità was awarded the contract for the first light rail line in Barcelona, that of *Trambaix*, and later it would be awarded the contract for the second line, that of *Trambesòs*. This single purpose vehicle was originally constituted by a large number of shareholders, the main ones being three construction companies owning more than 40% of the firm's shares (FCC: 19.3%, Comsa: 12.4%, and Acciona: 10.5%), and a rolling stock company, Alstom, that owned 25%. Among the minor shareholders were two banks (Banc Sabadell: 5% and

far greater travel savings than the light rail connection); (2) it included spurious travel savings accounting for 94% of total social benefits (70% of total savings are below 1 minute); (3) no investment cost overruns or full project life-cycle emissions were taken into account; (4) it disregarded any potential increases in traffic congestion due to road allocation to the light rail; and (5) many inputs were matched to non-binding Urban Mobility Plan objectives, as if these were a direct result of a valid forecasting process (self-fulfillment of transit and traffic demand trends).

Société Générale: 1%), two public firms that operate surface transportation services (TMB and *Ferrocarrils de la Generalitat* – FGC, both with 2.5%), and a private bus service operator (Soler & Sauret: c. 20%).¹² Table 1 in Carpintero and Petersen (2015:39) shows how the contracts for construction and operation might be articulated. Here, construction companies undertook the building of the infrastructure; the rolling stock company provided the trams and was responsible for their maintenance; and operation companies were in charge of running the tramline.¹³ Overall, the contracts specified a rate of return for investment in *Trambaix* and *Trambesòs* of 6.54 and 6.84%, respectively, as indicated in clause 3.2 of the final version of their contracts, and a rate of return of 10% was granted for operational expenses incurred by the concessionaire (Bel, Bel-Piñaña, and Rosell, 2017:154).

The first president of *Tramvia Metropolità* was Mr. Albert Vilalta, who had been regional minister of environmental affairs (CDC) until 1996, and later Vice-minister of Public Works in the Spanish Government (until 2000). During his presidency (2000-2011), the tram company was active during the campaign for the referendum held in 2010. The concessionaire funded trips to visit cities with similar tram systems, and produced a video in favor of the connection options to the tune of 200,000 euros. The tramway CEO, Mr. Javier Vizcaino,

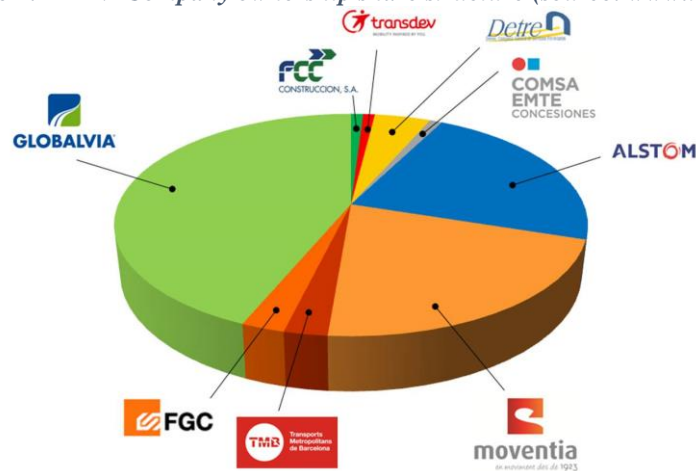
¹² Shareholding percentages may have undergone marginal changes because of the sequential process of concessions, and the way in which the shareholding (with identical members in both) was structured.

¹³ Note that Carpintero and Petersen (2015) define such contracts as ‘unbundled’. However, the way in which they are structured and the way they operate in practice means they could also be categorized as ‘bundled’ contracts, insofar as the concessionaire was responsible for making decisions with regard to construction and operation.

justified the company's involvement on the grounds that it "has the right to improve its business".¹⁴

Vilalta was replaced in 2011 as president by Mr. Josep Maria Culell (CDC), who had formerly been regional minister of Public Works and Transportation (1980-83; 1993-94) and regional minister of Finance (1983-87). His mandate extended until 2014, and in this period, in 2013, a major change took place in the shareholding structure. As a result of this,¹⁵ the main shareholders became Globalvia, Moventia, Alstom, Detre, FCC Construcción, COMSA EMTE and Transdev, while the two public firms, TMB and FGC, retained their minor ownership share of 5% in total. While the ownership of the construction companies appeared to have fallen sharply, this was not in fact the case as FCC owned 50% of Globalvia.

Figure 1. TRAM Company ownership share structure (source: www.tram.cat)



As mentioned above, the city government elected in 2015 was heavily committed to the connection and one of the first steps it took was to appoint Mr. Oriol Altisench as Coordinator

¹⁴ See <https://www.elperiodico.com/es/barcelona/20100415/el-tranvia-paga-la-campana-de-herreu-sobre-la-diagonal-262666> (retrieved July 24, 2018).

¹⁵ See https://elpais.com/ccaa/2013/09/26/catalunya/1380222950_994613.html (retrieved July 24, 2018)

of the TNCP. At that time, Altisench also held the post of Dean of the Civil Engineers Association, a professional organization and influential lobby in the infrastructure sector and extremely active in promoting public works. Later, in 2016, the City Council appointed Mr. Pere Macias as Strategic Director of the TNCP. Macias, who had been the regional minister that promoted the tramway in the late 1990s, is also President of the *Cercle d'Infrastructures* Foundation (an interest group that lobbies in favor of the promotion of infrastructure projects). His appointment was seen as a strategy for influencing the position of Macias' party (CDC, later re-named PDCat) in the City Council, which had been strongly opposed to the connection project.

Other changes were made to the tramway company. In late 2016, Mr. Felip Puig was appointed president. He had been the regional minister under whom work on the tramway had been completed in 2001-2003, and again he was a member of the regional government (CDC) between late 2010 and early 2016, less than a year before his appointment to the presidency of the firm (of which the regional government is the regulator).¹⁶ Once again the tramway company has been very active in the political process that took place in spring 2018 in relation to the tramway connection, in a race promoted by the city mayor to obtain a majority in the city council in favor of the connection. The city government used different tools to publicize the project, among them a city-wide survey paid for by the tramway firm¹⁷, here again on the assumption that it was entitled to foster its business, as it had argued in the 2010 referendum campaign. However, in April 2018 a majority of city council members rejected the project; which put an end to the debate, at least until a new city council is elected.

¹⁶ See: <http://elvigia.com/felip-puig-nuevo-presidente-de-tram/> (retrieved July 24, 2018)

¹⁷ See: <https://www.naciodigital.cat/noticia/150772/enquesta/tramvia/difosa/ajuntament/va/pagar/empresa/tram> (retrieved July 24, 2018)

6 Discussion

Despite the various studies and reports published, proof of the positive social returns of the tramway connection is unconvincing. Indeed, many doubts remain about the viability of the project and numerous reasons can be identified to question the outcomes reached by the reports: not least because of design faults in the planning process, the technical quality of the studies themselves and the private interests represented by lobbies promoting the project.

Indeed, the tramway network has been subject to all manner of political favoritism, a trend that has been exacerbated in recent years both at the city government level and at that of the firms involved. The city council considered the project an important milestone in its urban mobility mandate, while the private company saw an opportunity to extend its network and business without having to take on any significant risk. Thus, both parties to the PPP agreement pushed hard to remove the obstacles hampering approval of the new tramway connection. Clearly, the contractual conditions guarantee the profits of the concessionaire, a mixed firm with only residual government ownership. Indeed, little was to be changed with the enlargement of the network, providing as it would additional profits at no risk to the private party and little or no gain to the public administration's treasury (although, in fact, the investment would generate an additional operational deficit). As such, it should come as little surprise that the concessionaire was highly active in promoting the connection project, both in the referendum process of 2010, as well as in the decision-making process played out in recent years.

Furthermore, the existence of a revolving door between government and top executive positions in the mixed firm has been notable, highlighting the role played in the project by political favoritism and private interests. From the outset, the presidents of the mixed firm had all previously served as prominent members of the regional government that pioneered the promotion of the project (CDC). Indeed, the current president was precisely the regional

minister involved in the initial development of the network between 2001-2003, highlighting the fact that connections between the public institutions engaged in the project and the mixed firm have been the rule.

This case study has illustrated the importance of risk transfer in the design of PPPs, an element that is incorporated precisely to create appropriate incentives to enhance efficiency gains and to avoid the opportunistic behavior of the parties involved. If the private initiative bears the risk, especially if this is demand risk, it is highly unlikely to want to get involved in white elephants. On the other hand, if the project does not entail any significant demand risk for the private party, incentives will exist for it to promote any type of project, white elephants included. This occurs at the expense of the taxpayer and the user, the parties that ultimately have to bear this risk. For this reason, PPPs cannot be considered superior in terms of project evaluation or better filters of “good” investments without an exhaustive analysis of risk allocation. Barcelona’s tramway connection is illustrative of a case in which incentives are aligned for the active promotion of a white elephant despite its being managed and governed by means of a PPP.

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