2006-08

Economic Regulation of Transport Infrastructure and Services: The Case of the Lisbon Metropolitan Area

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TRANSPORTATION CONFERENCE-BANFF, ALBERTA, CANADA-2006
http://hdl.handle.net/1880/44338
Presentation

FIRST INTERNATIONAL CONFERENCE ON FUNDING TRANSPORTATION INFRASTRUCTURE

ECONOMIC REGULATION OF TRANSPORT INFRASTRUCTURE AND SERVICES: THE CASE OF THE LISBON METROPOLITAN AREA

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ABSTRACT

Economic regulation refers to policies by which the State, or some institution on its behalf, decides on which firms participate in the market and defines, for the services (or products) provided, the respective prices, quantities to be supplied and qualitative features. This paper presents main aspects of the actual regulatory regime of transport infrastructure and services in the Metropolitan area of Lisbon. It takes stock of the regulated agents (*lato sensus*, including private and public providers of infrastructure and services), and respective revenue sources, with emphasis on charges that are specifically transport related. A broad perspective on the agents' revenues pools is given through the inclusion of taxes and subsidies in the analysis. Forms of cooperation between the public and private sector, namely public private partnerships for infrastructure investments are also discussed. The paper concludes pointing out critical aspects to be improved.

INTRODUCTION

The literature on the theory of economic regulation, developed from the 19th century, is now vast[1]. Economists have questioned the factors that explain why markets are subject to economic regulation under different perspectives. A short reference ought to be made to two alternatives theories of regulation, namely, the *public interest theory* and the *capture theory*. For the public interest theorists (for instance, Viscusi, Vernon, and Harrington) regulation is an expression of the political pressure emanated by the public towards the correction of market failures, such as externalities, public goods and imperfect information. Stigler's *capture theory* provides an analysis of the demand and supply for regulation, respectively from "economic groups" and the State. A core idea of this theory is that "as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit" (Stigler, 1971). A scholarly discussion on the virtues and limitations of these theoretical perspectives on economic regulation is beyond the scope of this paper. For our purpose, what is of interest to retain is that economic regulation refers to government restrictions on market exit and entry and definition of the prices, quantities to be supplied and qualitative features of a given type of product and service.

According to the Estache et al. (2003) to the regulator can choose from a set of specific instruments to achieve any combination of regulatory objectives. Main policy instruments include:

- ✓ Regulatory regimes (rate of return regulation , price caps, revenue caps, etc);
- ✓ Contractual obligations (investment levels, quality levels, public service obligations, etc);
- ✓ Tariff level and structure;
- ✓ Subsidies (including financial compensations related with public service obligations).

This paper aims to discuss the main aspects of the actual regulatory regime of transport infrastructure and services in the Metropolitan Area of Lisbon (MAL), by looking to features of specific policy instruments in force. More precisely, one shall focus in the following aspects:

- ✓ Road and railways infrastructure charging and definition of tariffs in urban and interurban public transport services;
- ✓ Central and local government tax instruments levied on road transport users (private and professional freight) as well as the alternative forms of central government subsidisation to transport service providers;
- ✓ Public private partnerships for road infrastructure investments.

REGULATORY BODIES AND REGULATED AGENTS

The MAL is a territorial unit formed by 18 municipalities[2], with a total area of 2866 km2 and 2 661 850[3] inhabitants.

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[1] Recent reviews can be found in Laffont and Tirole, 1993.

[2] Alcochete, Almada, Amadora, Barreiro, Cascais, Lisboa, Loures, Mafra, Moita, Montijo, Odivelas, Oeiras, Palmela, Sesimbra, Setúbal, Seixal, Sintra and Vila Franca de Xira.

[3] Data from the 2001 Census.

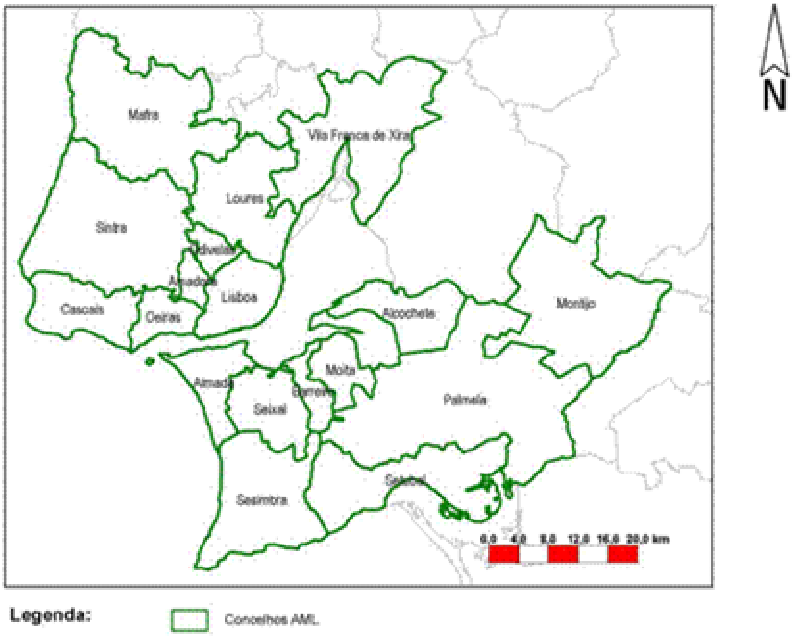

Figure 1 – Map of the Metropolitan Area of Lisbon

Main regulatory responsibilities are scattered among several government departments and bodies under the coordination of the Ministry of Transports, such as:

- ✓ The Roads Institute, which holds the statutory functions of representing the government in the negotiation and enforcement of road concession agreements. These functions only concerns the fundamental and complementary national road network, as defined in the Law Decree nº 222/98, since local roads are under the responsibility of the municipalities. Thus, municipalities are responsible for investment and maintenance in road infrastructures that not fall within the National Road Plan.
- ✓ National Institute of Rail Transport (INTF), which holds the statutory duties of railway market monitoring and promotion and enforcement of competition laws within the railway sector. INTF proposes the adoption of rules concerning rail public service, monitors the award and management of public service contracts and assists the Government in public service. Since 2004, the INTF is also responsible for the regulation of the Metropolitan of Lisbon. (see Despacho SET n.º 10004/2004, of 21.05)
- ✓ General Directorate of Inland and Fluvial Transport, which is responsible for the management of the public transport market, including licensing of operators and award and monitoring of public transport concessions. Furthermore, it also monitors the application of the rules on access to the market of road freight transport.
- ✓ The Metropolitan Transport Authority of Lisbon (MTAL), established in 2004 (Law-Decree n. 232/2004). The statutory duties of this body include the integrated planning, coordination, and development of the transport system in the MAL. After 2004 elections the process of installation of the MTAL has been halted. Consequently, the MTAL is still waiting for the effective entry in duty.

- ✓ The Ministries of Regional Planning and Finances also participate in decisions with impact in the functioning of the transport markets. For instance, in 1998 the base for a road concession agreement was issued by the former (see Law Decree n. 393-A/98) while the latter has a track record of intervention in decisions related with the level and structure of road infrastructure charges and public transport tariffs. Decisions with relevant impact in the national budget, such as ad-hoc allocations of financial compensation related with public service obligations, are issued at the level of the Council of Ministries (see for instance, Council of Ministries Resolution n. 174/2005).

The regulated operators in the MAL, i.e. road and railways infrastructure managers and suppliers of public transport services (as of June 2004), are depicted in the following Table.

Type of regulated operator	Regulated operators
Railways and Metro services	
	Fertagus
	Metropolitano de Lisboa
Buses and coaches services	António Gomes Tecedeiro
	Barraqueiro Transportes, SA
	Centauros - Viagens e Turismo
	Companhia de Carris de Ferro de Lisboa
	Henrique Leonardo da Mota, Lda
	Isidoro Duarte, Lda
	Joaquim Jerónimo, Lda
	Rodoviária do Alentejo, SA
	Rodoviária de Lisboa, SA
	Rodoviária do Tejo, SA
	Scotturb, Lda
	Transpinho
	TST - Transportes Sul do Tejo, SA
	Transportes Colectivos do Barreiro
	Vimeca Transportes - Viação Mecânica de Carnaxide
Fluvial services	Transtejo - Transportes do Tejo, S.A.
	Soflusa, S.A.
Road Concessionnaires	Brisa SA
	Lusoponte SA
	Auto-Estradas do Atlântico SA
Railways infrastructure manager	REFER
National road network infrastructure manager	Roads Institute

* The list does not include other services eventually authorised by the municipalities.

Table 1 – Road and railways infrastructure managers and suppliers of public transport services in the MAL

Source: DGTT 2004

INFRASTRUCTURE CHARGING AND TARIFF SETTING

The use of regulatory instruments envisaging the control of the maximum values and the definition of the level or structure of public transport tariffs, road tolls and charges for railways infrastructure use is a well established practice in Portugal. According to the Portuguese law a charge corresponds to a pecuniary flow which entitles for the provision of a specific service (or good), i.e. there is a discernible utility to be received by the payer (see Law-Decree n. 26/2002 – Economic classification of public revenues). In this chapter, one aims at providing an overview on the transport charging framework in force in the MAL.

The charging regime for the railways infrastructure is defined by the Law Decree 270/2003, which transposes the First Railways package. Following a public consultation process the detailed regulation on the methods and rules of calculation for the railways infrastructure charges was issued in 2005 (Regulamento n. 21/2005). This regulation also includes:

- ✓ The definition of the infrastructure manager activities;
- ✓ The regulation accounts of the infrastructure manager (IM). These accounts, which should be sent every year to the regulator, should contain an appropriate disaggregation of the IM cost structure. Costs that are incurred in the production of the IM activities should be clearly presented in order to justify the charges levels to be applied each year.
- ✓ The performance improvement regime, which is based in a monitoring system for the rail network. The core objective of this system is to foster the efficiency in the services to be provided by the IM to the rail operators.
- ✓ The rules for the intervention of the regulatory body.

The evolution of the infrastructure charges for the so called essential services to be provided by the infrastructure manager (defined in Art 27 of the Law-Decree n. 270/2003, and including the access to the infrastructure, use of granted capacity, etc) is linked with the evolution of a consumer price index minus 1%. This regulatory element corresponds to an incentive signalling the willingness of the regulator to induce the incumbent to achieve efficiency gains. However, since the regulatory time lag is just of one year there is a weak incentive to induce the incumbent to capture efficiency gains exceeding that fixed threshold. On the other hand the long term commitment of the regulator to that incentive scheme seems dubious, since there is a clause allowing the regulator to change the incentive rule every year.

Presently, there are three operators of tolled roads and bridges in the MAL. The largest is BRISA, which operates most of the Portuguese tolled motorway network. This company acts on the basis of a concession, which is valid for a period of 30 years. Recent significant amendments to the original concession contract, signed in the 70's, have been issued in 1997 (the Law-Decree n. 294/97 establishes the rules of concession contract awarded to BRISA, which is valid for 30 years). Other amendments have been published in 1999 (including revision of the concession scope and public financial participation) and 2002 (re-introduction of tolls in the CREL – Circular Regional Exterior of Lisbon – road section). A concession contract for the operation and maintenance of a tolled motorway section in the West region of the MAL has been awarded to Auto-Estradas do Atlântico in 1998 (Law-Decree n. 393-A/98). The two tolled bridges in the Lisbon area - Vasco da Gama and 25 of April - are operated by Lusoponte on the basis of a single PPP concession agreement.

The structure of the toll regime that applies to the three road/bridge concessionaires, referred above, considers four vehicle categories. These categories are defined in function of the number of axles and the height of vehicle measured from the first axle. Class 1 includes motorcycles and vehicles with a height, measured from the front axle, less than 1.1 metres, with or without trailer. Class 2 includes vehicles with two axles and with a height, measured from the front axle, equal or higher than 1.1 metres. Class 3 includes vehicles with three axles and with a height, measured from the front axle, equal or higher than 1.1 metres. Class 4 includes vehicles with more than three axles and with a height, measured from the front axle, equal or higher than 1.1 metres. The reference tariffs are defined in each concession contract, in a case-by-case basis. In the case of BRISA and Auto-Estradas do Atlântico road concessions the reference values are updated every year as a function of the evolution of a consumer prices index. The value of the tolls for the crossing of the Tagus River bridges, have been changed at the occasion of the 2001 "Financial Rebalance Agreement". This financial agreement settles down a regime for the annual update of the value of tolls based on the evolution of the consumer price index. It is worth referring that the recent publication of the Directive 2006/38/EC on the charging of heavy goods vehicles for the use of certain infrastructures (amending Directive 1999/62/EC) might imply adjustments to the current practice of tolling and respective use of revenues in Portugal.

Urban public transport tariffs have been historically adjusted, by the successive governments, considering the annual inflation values. A noticeable change to this usual procedure occurred in 2005. Taking into account the steady increase in the fuel prices, price adjustments in urban and interurban public transport are currently being indexed to this cost factor. The formula used in the computation of the maximum allowed price increase (contained in the Despacho Normativo n. 45-B/2005), is as follows:

$$\Delta T_n = A.\Delta PMC_{n-1}$$

$$\Delta PMC_{n-1} = \frac{PMC_{n-1} - PMC_{n-2}}{PMC_{n-2}}$$

where

ΔT_n = Variation of tariffs in the trimester *n*

A = Constant that reflects the relation between operators' revenues and the relative weight of the cost of fuel in the operators' costs structures. It is currently assumed that this value is 0.3[4].

PMC_n= Simple average of reference diesel prices, according to the Portuguese General Directorate of Energy, in the trimester *n*.

Tariff setting for the railway suburban service linking the South and North margins of the Tagus river, provided by Fertagus under a 30-year concession contract, is established through the Law-Decree n. 78/2005 of 13.04 (Base IX of the Annex). According to the law, tariffs in force after 31.12.2004 can be annually revised, considering a real fluctuation margin of 5% (positive or negative) in relation to the average base tariff. However, the State still holds the veto power to any tariff change although this action implies a financial compensation to the concessionaire.

[4] As of April 2006.

SUBSIDIES AND TAXES

Decisions on the level and structure of taxes and subsidies are not a statutory duty of the transport regulatory bodies. In fact, most of the financial flows linked with these instruments are under the sphere of decision of central or local governments. Right below one shall provide an overview on the modalities of financial State intervention in the transport sector and on the set of taxes levied on transport users.

In broad terms, the ultimate purpose of the financial State intervention is to make a particular service or product available at a price that the public can readily afford, when the service or product cannot otherwise be profitably supplied at this price (Link et al). According to the Portuguese law, the direct financial intervention of the State in the activity of transport operators and infrastructure managers can be materialised through different modalities. These modalities are described in the following Table[5].

Modality of intervention	Function	Financial Source
Compensatory payments	Financial compensations related with the imposition of public service obligations by the State	Public budget
Subsidies	Financial rebalance of companies	Public Debt Regularisation Fund (PDRF)
Capital Endowments	State participation in specific investments; Financial restructuring of State owned companies.	Several sources including PDRF, public budget, etc
Assumption of liabilities and regularisation of responsibilities	Financial restructuring	Public budget (through the emission of public debt)
Guarantees	Guarantees for companies loans	Nofulfilment to be covered by the public budget
PIDDAC – Program of investments and development expenses of the Central Administration	Co-financing for new investments or upgrade of infrastructure	Public budget and/or EC funds

Table 2 – Types of financial direct intervention of the State

As the Table shows, modality of interventions may assume diverse designations according to the objectives to be pursued. For instance, in the MAL the financial equilibrium of public transport operations has been highly dependent on compensatory payments due to the generalised chronic operational deficits in the sector. However, financial sustainability has

[5] Note that the Table does not include hidden subsidies, such as special tax exemptions or forgiven interests.

been highly instable due to the lack of clear rules for the allocation of these subsidies. At this respect, it should be referred that the amounts of the financial compensations related with the imposition of public service obligations by the State are annually decided on a had-hoc basis.

According to Link et al (2000), a tax is a levy that must be paid with no tangible counterpart to be expected from the State (a specific service or good) or that just corresponds to a service or good that is not in proportion to the payments. The definition that can be found in the Portuguese public budget framework law follows the same rational, stating that the revenues accruing from the taxes are aimed at financing the general objectives of the State, thus reinforcing the lack of connection between the payment of a tax and the provision of a specific service (Law-Decree n. 26/2002). However, although non-earmarking of taxes revenues is a core principle in the Portuguese public budgeting framework the law admits exceptions to this general rule. Earmarking of tax revenues signals the willingness of the State to not waste the revenues in other sectors. Earmarking might also induce the social acceptability of tax burden increases. However it brings a cost in terms of flexibility. It is not hard to imagine how difficult it would be to continually assuring that the money is wisely spent in the transport sector since there may be good uses of the revenues also outside the transport sector (Proost et al, 2001).

In the case of the taxes levied on transport users, there are currently no exceptions to the non-earmarking general rule, implying that neither specific beneficiaries nor purpose of the taxes revenues are specified. The following Table presents the taxes falling upon transport users in Portugal and consequently in the MAL.

Tax	Recipient
Municipal Tax on Vehicles (on light passenger vehicles or mixed used vehicles up to 2to a gross weight of 2.5 tonnes) Law-Decree n. 143/78 of 12.06	Municipalities
Municipal circulation tax (on private goods vehicles) Law-Decree n. 116/94 of 03.05	Central budget (formerly earmarked to the Portuguese Roads company)
Road haulage tax (on light and heavy goods vehicle used in professional transport) Law-Decree n. 116/94 of 03.05	Central budget (formerly earmarked to the Portuguese Roads company)
Motor vehicle tax (on new/imported vehicles) Law-decree n. 40/93 of 18.02. In general, it is changed every year through the State Budget.	Central budget
Value added tax (on vehicle sales, tolls, public transport, fuel, etc)	Central budget
Fuel Tax	Central budget
Municipal Transport Tax	Municipalities
Parking tax	Municipalities

Table 3 – Taxes with incidence on transport users

The Table shows that the revenues related with three of the taxes are allocated to the municipalities, which have discretionary power on how it should be spent. No reference could be found on earmarking for public transport operations or transport infrastructures investments. It should be noted that, although published the official journal, the Municipal Transport Tax, established by the Law-Decree n. 439/83 of 22.12, has never been implemented. This tax would have been applied to companies registered in municipalities with a population ≥ 50.000, which would have to pay a value ranging from 0.5% to 1.5% on the employees wages[6].

PUBLIC PRIVATE PARTNERSHIPS FOR INFRASTRUCTURE INVESTMENTS

The need for the steady development of high quality infrastructure under severe budgetary constraints is behind the development of road PPPs in Portugal. Currently, Portuguese motorways and most high capacity roads are being financed under PPP agreements, implying both real tolls and shadow tolls regimes[7]. In the case of shadow toll regimes the payments to the concessionaires are made by the State, and are based on traffic levels. In these cases the financial burden falls upon taxpayers rather than the road user. In the MAL region there are currently three concession contracts in force, namely signed with Brisa, Auto Estradas do Atlântico and Lusoponte.

The law which determines the general rules for PPPs, which is valid not only for the road sector but for other sector as well, was published in 2003 (Law-Decree n. 86/2003 of April 26th). This legal provision includes a specification of the different phases of the PPP project and the respective role of the State, a clarification of the powers of the Ministry of Finances and Ministry of Transport and states the principles for risk sharing between the parties. In relation to the assessment of the value for money of the PPP alternative, the framework law establishes the use of a public sector comparator against which the PPP alternatives should be analysed. However, this tool is not yet developed and therefore is not being applied in the economic assessment of PPPs in the road sector. No legal provision stating the method for the selection of the tenders has also been found. Still in 2003, a decision of the Ministry of Finances set up the values of the inflation and discount rates to be used in the economic studies supporting the start-up of PPPs. Having said that, it seems that both the decision for the set up of a road PPP alternative and the respective evaluation of the bids is mostly based on financial and legal due diligences.

In the scope of the preparation, evaluation and enforcement of road PPPs, the Portuguese Roads company (EP) is the entity that represents the Ministry of Transports. The management of the concessions contracts between the private operators and the State is also an EP´s competence. Since there are no specific umbrella legislation for the enforcement of road

[6] This scheme is similar to the French "Versement Transport".

[7] The other roads included in the National Road Plan (see Law-Decree n. 222/98) are directly financed through the public budget (more precisely through the PIDDAC – Program of Investments and Development Expenses of the Central Administration). The municipalities are responsible for the investments, maintenance and upgrading of the roads not included in the National Road Plan.

concessions the powers of EP in this matter are defined in each concession contract. For instance, the contracts might contain specific clauses on the type of information to be provided by the concessionaire to allow for EP´s control and management of the contractual relationship. Therefore, powers to collect information are specified in each concession contract. Appeals to EPs decisions, in the scope of the management of concession contracts are dealt by courts (one mainly refers to renegotiation processes resulting both from EP and concessionaire claims, the latter mostly related with financial equilibrium of the contract).

The State owned company Parpública (which manages the state's shareholdings) is the entity that represents the Ministry of Finances in the promotion of PPPs. This entity can intervene in all phases of the project life cycle to protect the public interest. The Inspectorate-General for Finance is responsible for the control of the economic and financial aspects of the concession contracts, namely by carrying out audits to the concessionaire accounts.

The global cost for the State associated with PPP contracts includes the following components:

- ✓ Shadow toll payments agreed by the State under PPP contracts. Note that the EP does not hold a discretionary power to decide on these payments. Parpública also holds the power of decision in all phases (representing the Ministry of Finances) and moreover the adjudication is made by joint decision of the Minister of Transports and Minister of Finances;
- ✓ Subsidies to investment granted by the State (Brisa and Lusoponte) and compensations for road toll reductions imposed to the concessionaire Brisa;
- ✓ Land expropriations;
- ✓ Financial re-equilibrium costs derived from contract renegotiations;
- ✓ Roads widening.

The risks with PPPs contracts that are borne by the State derive from the financial equilibrium clauses. These clauses list the set of events that allow the concessionaires to require State compensation during the contract period, in the case of rupture of the contractual financial equilibrium. The contractual financial equilibrium is based on a set of macro and microeconomic expectations described in the so called financial "Base Case" model. The model generally includes relevant costs, such as consultancy fees, margins debt service coverage ratios, margins for the shareholders profit, etc. The financial equilibrium claims, which in certain cases might lead to the renegotiation of the contracts represents a significant proportion of the costs born by the State with PPP in the road sector. The following Table shows the financial costs born by State in relation to the concession contracts signed with the operators with activity in the MAL. Note that only Lusoponte is exclusively operating in the MAL since Brisa and Auto Estradas do Atlântico also operate roads outside the MAL.

Financial Costs of the Portuguese State (Million €)	Real Toll concessions			
	Auto Estradas do Atlântico	Lusoponte	Brisa	Total
Contractual payments	6,59	0,00	0,00	6,59
Subsidies / State contributions	0,00	341,00	595,00	936,00
Expropriations	64,62	0,00	0,00	64,62
Financial re-equilibriums claims	23,25	408,40	0,00	431,65
Other costs	24,00	0,00	0,00	24,00
Total	118,46	749,40	595,00	**1.462,86**

Source: Portuguese Court of Auditors (November 2005)

Table 4 – Financial cost of the Portuguese State related with three road PPPs: Auto Estradas do Atlântico, Lusoponte and Brisa (as of May 2005)

The Table shows that financial costs related with financial re-equilibrium claims represents around 30% of the costs born by the State in relation to the three contracts. These financial costs result from the factors synthesised below.

- ✓ Auto Estradas do Atlântico:
  - Contractual payments are related with compensation for the suspension of real tolls in specific road section;
  - Financial re-equilibriums claims mainly result from unilateral changes to the design of the roads, *force majeure* and delays in the expropriation processes;
  - Other costs relates to the increase of a road section;
- ✓ In the case of Brisa, the values presented mostly relates to investment subsidies and subsidisation of road tolls (including price discounts fixed by law);
- ✓ In the case of Lusoponte, the amount of financial re-equilibriums claims translates the outcome of seven changes to the concession contract, which occurred in the period 1995 and 2001. The pitfalls in the implementation of the base case model result from the social turmoil that occurred in the sequence of the increase of the prices of the 25th of April. The following Table presents some core features of the contract renegotiations between the State and Lusoponte.

Initial contract	Contract resulting from the 6 financial re-equilibrium agreements	Contract resulting from the Global Agreement
"Two bridges, same price " principle	"Freezed prices" principle in the 25th of April bridge	"Two bridges, different prices" principle
Indexation of the concession duration to a fixed traffic volume	Indexation of the concession duration to a fixed traffic volume	Fixed concession duration - 35 years
Concessionaire bear part of the maintenance costs of the 25th of April bridge	Concessionaire bear part of the maintenance costs of the 25th of April bridge	Concessionaire do not bear the maintenance costs of the 25th of April bridge
No tariffs discounts or exemptions on the two bridges	Introduction of discounts and exemption of payments in August in the 25th of April bridge	Consolidation of discounts and exemption of payments in August in the 25th of April bridge
Concession contract under a general tax regime (VAT + Income Tax)	Special Income Tax regime and reduction of VAT rate of the tolls from 17% to 5%	Maintenance of a VAT reduced rate for the tolls and introduction of a cap for the Income Tax rate to be applied to the concessionare
Iimplicit internal rate of return for the concessionaire of 11,43%	Iimplicit internal rate of return for the concessionaire of 11,43%	Iimplicit internal rate of return for the concessionaire of 11,43%
No State compensations	Existence of State compensations	Existence of State compensations

Source: Portuguese Court of Auditors (November 2005)

Table 5 - Synthesis of the changes to the Lusoponte PPP contract

Although it is beyond of the scope of this paper to carry out a detailed examination of all the contingencies that led to contract renegotiations some hypotheses might be advanced. Guasch, (Guasch, J. L 2004) proposes a general set of factors that significant influence the incidence of renegotiation in PPP agreements[8]. From that set, one suggests a few potential factors that might be relevant in the Portuguese case:

- Macroeconomic shocks;
- Award of concessions on the base of the lowest tariff criteria. Low priced bids might imply poor technical quality. These technical problems are then solved in a posterior involving an increase in the investment costs.[9]
- Regulatory credibility, entailing the existence of a regulatory body that is able to perform an effective contract enforcement

[8] Contract incompleteness and renegotiation have been widely examined in recent years. Guasch refers that a large amount economists agree that most concession contracts are incomplete and that renegotiation is a way to repair resulting inefficiencies. Transaction costs are generally mentioned as the main factor to explain contract incompleteness (Guasch, J. L. 2004. *Granting and renegotiating infrastructure concessions: Doing it right*. Washington D.C.: World Bank Institute.).

[9] A detailed discussion on the importance of this issue in the Portuguese context can be found in the Audit Report n.º34/2005 "Road concession in SCUT regime – Follow-up" produced in 2005 by the Portuguese Court of Auditors.

- Existence of an appropriate set of regulatory instruments, such as regulatory accounting systems, cost and financial models and existence of benchmarking referential data;
- Electoral cycles. An election year might be related with an increased probability of renegotiation, since renegotiations could be driven by political reasons. On the other the State capture effect might also induce renegotiation. The rationale is that when government with close ties with incumbents assume power, they are more likely to tolerate renegotiations.

CONCLUDING REMARKS

The process of regulatory reform of public transport services in the MAL has been halted due to the practical uncertainties on the model to be applied and on the possible future the role of the public sector institutions. In the case of PPPs for the provision of roads, the occurrence of contract renegotiations imposes high costs to the public budget.

In short, two broad recommendations emerge from the analysis that has been carried out:

- ✓ The definition of a consistent model for the regulation of public transport services is urgently required. For instance, a crucial aspect relates to the definition of transparent rules for the computation of the financial compensations related with the imposition of public service obligations by the State. Adequate contractual relationships might also require the revision of the criteria for tariff adjustments and periodic price reviews;
- ✓ In general, regulators still miss appropriate instruments to perform their duties effectively. Thus, short-term regulatory efficacy would be improved through the development and implementation of appropriate regulatory tools. For instance, regulatory accounts could be developed to allow for systematic monitoring of operators' costs and benchmarking operators' performance in order to foster efficiency gains. In the domain of PPPs for the provision of road infrastructures, the design and application of the public sector comparator needs to be specified and implemented. The evidence also suggests that effective economic and financial monitoring of road PPPs requires a much better specification of informational requirements set in the concession contracts.

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