

# The Governance of Local Public Transport Services: the efficiency of public and private competitors in the EU member States market.

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SUMMARY: 1. Introduction. – 2. Measuring changes of policy frameworks in the EU. – 2.1. Preliminary juridical definition. – 2.2. Changes of the policy framework within the Member States. – 2.3. The EU legal framework. – 3. Results of Comparison under a Critical perspective. – 3.1. Forms of contracting the LPT service and provider performances. – 3.2. The role of Government-owned enterprises in the market of LPT. – 3.3. Citizens' satisfaction from LPT services across EU and how it is related to relevant policy reforms. – 4. Conclusions and Directions for Future research.

## 1. Introduction

A key success factor for every city is undoubtedly an efficient public transport system. Public transport includes various services that provide mobility to the general public such as buses, metro, light rail, tram, ferries, shared taxi, and their variations. Being a basic instrument of mobility for a big percentage of the world's population, it forms one of the driving forces of economic and social life (Polat, 2012). Local Public Transport (LPT) policies generally promote collective sustainable mobility in metropolitan areas. High quality public transport refers to the existence of a relatively fast, convenient, comfortable and integrated service which is able to attract discretionary travelers who would otherwise use their private vehicles. This way traffic problems such as congestion and environmental pollution can be diminished and consumer welfare (surplus) benefits are produced (Litman, 2016, Valeri et al., 2011).

Critical supply and demand in the LPT sector can be interpreted with the aid of factors related to economics and mobility as well as factors reflecting institutional characteristics and geographical patterns (e.g. level of personal income inequality, type of contracting, existence or not of a center of political decisions in the city etc.) (Albalade and Bel, 2010). An interesting point is that, although quality of service certainly affects demand, the level of demand can also have an impact on the level of service (Holmgren, 2013). Moreover, many aspects of modern life influence currently and expected to continue acting as factors that will affect the demand of LPT services in the future. More in detail, four factors of this kind are identified: the urban sprawl phenomenon, the ageing of developed societies, the radical technological progress and the creation of "sharing economies".

The term urban sprawl describes a new trend towards a low-density outward expansion. First coined as a term in 1937 for the US, nowadays the phenomenon becomes more and more intense in the European landscape as European cities increase their population while becoming less dense. Due to the lower prices of private transportation, people can move to the suburbs and still enjoy the positive externalities of the cities; therefore, those tend to sprawl (Glaeser and Kohlhase, 2004; Christiansen and Loftsgarden, 2011; Oueslati et al., 2015). Low density development increases provision costs for all offered public services, including local public transport; thus it has to be taken into consideration when planning public transportation of the future.

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The second point concerns the ageing of developed societies. In most western countries life expectancy has increased more and more in the last decades, and a similar pattern is expected to occur in the next years. Metz (2010) claims that the quality of life of elderly people directly depends on their possibility to commute and travel. Currie and Delbosc (2010) discuss the peculiar usage of LPT for this category of people, pointing out the necessity of services and facilities expressly suited for them. Similarly, Alsnih and Hensher (2003) point out the implications of the ageing phenomenon for future urban transport policies: New needs that will call for the supply of new services.

The third element expected to shape the future of LPT sector is the radical technological progress. In the last decades, the development and diffusion of ICT (Information – Communication Technology) drastically changed the variety of services offered (enabling for instance the delivery of new inter-modal services), the modes of production of these outputs (e.g. by reducing transaction costs) and their delivery (Neirotti et al., 2014). While the impact of technology on the production function of LPT is rather intuitive, several works indicate that this change will also modify consumers' behavior and their transport choices. For instance, Dal Fiore et al. (2014) pointed out that, being more informed about the places they could potentially visit, people will be likely to increase their mobility.

New technologies have contributed in enabling the rise of the so-called “sharing economy”. Sharing economy is described as a “peer-to-peer-based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community-based online services” (Hamari et al., 2015). In the field of transport, “ride – sharing” or “shared mobility” is defined as “innovative transportation strategy that enables users to gain short-term access to transportation modes on an as-needed basis”. It can include various forms of transportation, such as car-sharing, bike-sharing, carpooling and on - demand ride services (e.g. Uber). Alternative transit services, such as paratransit and shuttles, which can supplement bus and rail services are also included. (Shaheen et al., 2015). Car and bicycle rental companies mainly characterize the Transportation Sharing Economy allowing consumers to share access to an entire vehicle across time. Car sharing systems generally are associated to social benefits as they lead to the reduction of car ownership, with all the positive effects that this can have, such as lower demand for parking space, less congestion, reduced local pollutants and emissions (Baptista et al., 2015). Bike-sharing programs refer to the provision of bicycles to enable short-term rental from one docking station to another, aiming at increasing urban sustainable mobility. Public bicycle-sharing schemes have received sharply increased attention all around the world in recent years. (Moudon et al., 2005; Yin et al., 2016)

From the above discussion, it is obvious that public transport is going through a period of continuous and considerable change throughout the world. There is a noteworthy variety in the way public transport is organized among countries and considerable differences are met even among cities within the same country (Pedro and Macario, 2016). In many countries within the European Union (EU), reform in the public transport sector is taking place lately. Public transport is gradually transformed from production – oriented to customer – oriented and the main way to achieve that is in the majority of cases the use of service contracts between public authorities and private operators. Service contracts set bilateral commitments for the aforementioned parties involved. A tendency to shift towards incentive contracts which rely on qualitative requirements and attempt to achieve social targets is also observed (Hensher and Houghton, 2004; Beirao and Cabral, 2006; Marcucci and Gatta, 2007; Mouwen and Rietveld, 2013).

The internationalization of the public transport sector during the last two decades, drew attention to the fact that the disparities met among countries were sooner or later inevitably going to create legal issues and thus a debate started within the EU which eventually led to the adoption of a new Regulation by the European Commission in 2007 (Van de Velde, 2008).

In this context, the objective of the present paper is to critically examine the main policy reforms promoted by the EU and adopted by the Member States in the last two decades, regarding the Local Public Transport (LPT) industry. More specifically, the paper attempts to identify the existence of significant variations (if any) in the reform patterns across countries and to perform an evaluation of the role of government – owned enterprises. The paper also investigates whether European citizens have been well served by the evolution of policy reforms in this area and presents positive and negative examples of Member States' policy experiences.

The paper is structured as follows: After the introduction that takes place in the present section (Section 1), Section 2 examines the changes of policy frameworks in the EU regarding the LPT sector during the last decades. The Section starts with a presentation of preliminary definitions of key terms, a prerequisite in order to help the reader understand the analysis that will follow, which includes a discussion of the different policy frameworks that currently exist in a selection of Member States (that are considered as representative examples). Section 2 continues with an in depth analysis of the existing EU legal LPT framework and the evolution patterns that lead to its implementation and ends with a glimpse on the diversity of capitalism and how this has affected LPT in the EU. A critical comparison of the different policy frameworks among countries takes place in Section 3, followed by the examination of existing forms of contracting LPT and the performances of service providers. Section 3 also focuses on interpreting the role of government – owned enterprises in the market of LPT and the degree of EU citizens' satisfaction from the provision of LPT services and attempts to reveal how this satisfaction or dissatisfaction is related to the policy reforms that have occurred. The paper concludes in Section 4, with a critical overall analysis and suggestions for further research.

## 2. *Measuring changes of policy frameworks in the EU*

### 2.1. *Preliminary juridical definitions*

The complexity of measuring the policy frameworks in the EU induces to place some theoretical classifications of the most widespread governances of LPT, before the empirical comparison among European countries.

The first definition implies a strict juridical distinguishing between public and private *ownership* of the enterprises that supply the LPT services, on one hand, and the *awarding* procedures, on the other hand.

Beginning from the former distinction, it is necessary to mention that EU legislation gives freedom of choice to the Member States, as it results from the Article 295 TFUE. Consequently, every national system can opt for different solutions: Ownership can be public, private or a combination of the two and may include one or several stakeholders. In the *market initiative-branch* the local government only maintains a strategic role and leaves the tactical and operational level to the market operators. In this perspective a wide range of different arrangements are possible: From a strictly regulated form, alike the external regulation-model within the authority initiative, to a form similar to the more or less de-regulated open entry-model. Otherwise, in the *authority*

*initiative-branch*, the model of “direct public management” shows the following features: All relevant strategic, tactical, and operational planning and decisions are either directly within the public administration or through entities belonging strictly to the (local) authorities. Also financing is directly linked to the public administration, since deficits are usually covered by the local government. The choice of the best system depends on the size, form and dynamics of the cities as well as on legal, cultural and other local characteristics, but combination between the public and the private sectors for the provision of urban transport services is becoming more common (Konstal, 2016).

As for the second aspect, the awarding procedures for delivering public services, the different ways to attribute the LPT service to providers - with market or public initiative - can be resumed in two main modalities: 1) *Private awarding* through competitive tendering procedure (e.g. concessions to private entrepreneurs) and by means of a negotiate procedure to mixed-ownership companies (e.g. Public-Private Partnerships (PPPs), municipal companies); or 2) *Public awarding* (e.g. self-production, in-house providing).

Observing the *private awarding procedures*, the Article 5(3) of Regulation (EC) No 1370/2007, on public passengers transport services by rail and by road, defines the procedural requirements for the competitive tendering of public service contracts. It stipulates that, if a competent authority uses a third party, other than an internal operator, to provide public passenger transport services, “it shall award public service contracts through a fair, open, transparent and non-discriminatory *competitive tendering procedure*”.

Summing up, tender is the tool used by public authorities to play the regulatory role and to select an external provider in an optimal way in all organizational forms. In this model, the service of LPT is attributed to an external private entrepreneur with a particular tendering procedure that guarantees: Opening of the market to the competition, protection of the competitors to participate with a non- discriminatory, transparent, equal treatment. Indeed, the choice of proportionate, non-discriminatory and fair selection criteria, and their application to economic operators is crucial for the operators’ effective access to the economic opportunities related to concessions. Competitive tendering appears to be a widespread procurement strategy for increasing efficiency in the passenger transport industry.

Moreover, in the case of specific or complex requirements, the competent authority might also choose to negotiate with the pre-selected parties, after a pre-selection of tenders. An example of this occurs when bidding operators must come up with technologically innovative transport solutions to meet the requirements published in the tender documents. In this case, even when using pre-selection and negotiation, the selection and the award procedure must nevertheless comply with all the conditions set out in Article 5(3).

Notwithstanding these binding conditions, a main difference between tendering and negotiated contracts, pointed out by literature (Mathisen, 2016), is that in the former case there is higher insecurity due to the fact that no firm of those who participate in the process can be sure about which will actually win the contract.

On the other hand, as for the *public awarding procedures*, the Article 5(2)(b), of Regulation (EC) No 1370/2007, allows local administrative authorities to provide public passenger transport services by rail and by road themselves. In this model, a public

service contract of LPT, in presence of certain conditions, is directly awarded to a public organism, competitive tendering procedures are not required. Therefore, the local competent authorities, observing the TECKAL <sup>(1)</sup> criteria developed by the European Court of Justice, can supply the LPT services in self-production. Especially, in this form, to integrate the conditions required local authorities have to exercise over the company concerned a control similar to that which it exercises over its own departments and, at the same time, that company should carry out the essential part of its activities with the controlling local authorities.

## 2.2. *Changes of the policy framework within the Member States*

The EU Regulation on LPT follows two decades of reforms at the country-level. Since the 1980s many European countries have implemented significant changes in the organizational and regulatory framework of their road and rail transport sectors, especially focused on bus services, under the auspices of the European Commission (European Commission, 2005 and 2007). Starting with UK and France, even though in a different perspective, the general approach has been based on the idea that LPT services could be supplied either directly by publicly owned companies without tendering procedures, or by private - and likewise public - companies selected through tender. Nowadays, three governance models exist depending on the degree of internal market opening: direct commitment to public entities, fully owned by municipalities or local administrations; market competition with tendering procedures to private providers and hybrid forms of mixed public-private operators in a market competition with residuary regulation.

### a) *Private providers (with or without competition)*

The most important experience is probably the one occurred in the **United Kingdom (UK)**, in which Margaret Thatcher suddenly fully privatized services, except for London and Scotland. With regard to the organization of the sector, the Government of Wales, Scotland and Northern Ireland are vested of the powers to regulate and arrange the transport services, while in England these responsibilities are attributed to the central Government. Moreover, on the local level, *Counties* and *Unitary Authorities* (UA) are responsible for investing and managing local public transport networks – including light rail and bus, routes and stations –, developing and promoting new public transport schemes. In the six largest conurbations (MET areas) outside London, the *Integrated Transport Authorities* (ITA) and the *Combined Authorities* (CA), constituted by *Unitary Authorities*, hold a pivotal role in LPT sector, in partnership with the *Passenger Transport Executives* (PTEs) that overcome the key aspects of public transport planning and deliver. Observing for instance the bus services **outside London**, the “*Transport Act*” of 1985 introduced an important *competition between the private operators* because they can choose operating procedures, bus lines, links, frequencies and price lists (Amaral, 2009): Anyone can start up a bus service; bus operators are free to run whatever services they like as well as decide the fares they will charge and the vehicles they will use. However, the statistical data taken into account by more recent surveys underline that, although in theory this is a competitive and open market, actually most bus services outside London are provided by five big companies who rarely compete against each other. In this perspective, the *Local Transport Authorities* (LTAs) are only allowed to support bus services where no commercial service has been provided, through tendering procedures with private

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<sup>1</sup> First Teckal criterion: The necessary control over the in-house entity (organisational dependence). Second Teckal criterion: The essential part of the in-house entity's activities have to be confined to the tasks conferred by the controlling entity/entities (economic dependence) (European Commission, 2011).

operators: 20% of bus services outside London are provided in this way. In a quite rare number of urban areas outside MET areas, local transport authorities still own bus companies (*Municipal companies*) that operate in the same deregulated free market as elsewhere outside London.

As for the 33 municipalities of **Greater London**, the management is different. It is assured by the *Greater London Authority* (GLA) that plans, provides and procures the majority of public transport services, assuring the economic and social development of the sector. In particular, the LPT services are supplied by *Transport for London* (TfL), an agency of GLA, responsible for the entire transport sector within the area of London and also for some suburban transport services (e.g. the Overground). This agency handles the implementation of calls for tenders in the field of road transport and light rail. The private operators answer calls for tender according to criteria defined beforehand and contracts are awarded through *gross cost* incentives, connected to their performances.

In spite the cases of several EU cities (such as London, Stockholm, Barcelona), in which local authorities have chosen a geographical fragmentation, a horizontal separation, or a vertical disintegration that implicate the coexistence of several operators (public and private), in **France** these forms are very uncommon. The local public transport provisions, included in the Law n. 82-1153/1982 “*Loi d’Orientation des Transports Intérieurs (LOTI)*”, have been reformed by the “*Code des Transports*”, enacted in December, 2010, and modified in 2015. These legislative provisions establish that Municipalities, Departments and Regions are the competent authorities to regulate and organize the public transport services. In particular – with the exception of the urban area of Paris (*Île de France*), in which the *Syndicat des Transports d’Île de France (STIF)*, along with the *Société du Grand Paris*, handle the sector – for the services of local/urban transport the Municipalities are responsible, but frequently (in more than 80% of cases) the public transport planning and delivery are delegated to the Associations of Authorities that guarantee an interurban cooperation (*Communautés urbaines o Communautés d’agglomération*) and operate within a predetermined perimeter (PTU). Furthermore, this law specifies that the competent authorities choose the forms of contracting the LPT service that can be managed with tendering procedures (mandatory, in general, for all Regions, apart from Paris): By a private company, or through a public company under State control in the form of an industrial and commercial public service that has joined a fixed-term convention with the competent authorities. Moreover, the latter can choose between two contractual schemes: Concession of service (*délégation de service public*) or public procurement (quite rare option in France, less than 10%). The concession of public service with a private operator is the preferred choice in the awarding procedures: 90% of the urban authorities use to delegate the supply of public transport services to a single operator with an exclusive right on the territory (Amaral, 2009). The last 10 % of the urban authorities carry on a direct management to local public company (*régie municipale*), without tendering (as Tolosa, Marsiglia, Nizza, La Rochelle). Finally, as regards the territory of the **Île de France**, the organization of the local public transport is supplied by the Network of the Parisian transports *RATP, SNCF* (public operators), *plus* over than 90 private companies, under the supervision of *STIF*.

These considerations, along with the strong concentration of the sector in which the three main groups that supply the LPT services hold 75% of market share, give rise to the thought that in France “the number of bidders is now dramatically low for a usual call for tender. Competition is lifeless, and most of the commentators do not predict an improvement in the future” (Roy et al., 2006). The “medium” degree of liberalization (external and independent operators) observed in France goes “with some restrictions regarding contestability (characteristics of the tendering process: high discretion of the selection mechanism,

large networks, low transparency, and increasing risk attribution); preferableness of large public owned, market operators” (Konstal, 2016).

b) *Public* owned companies (with direct awarding or competitive tendering)

In the majority of the other European countries, minimal development of liberalization is observed. Direct award to locally public-owned companies is the most widespread arrangement, otherwise private third parties deal with small and complementary parts of LPT services.

As for the *Eastern Europe models*, the actual set-up is based on an integrated approach: municipalities, provinces, regions and central governments are usually all involved in ruling, managing and organizing activities of public transport, often without a clear distinction of roles (Guts Project, 2013). In *Czech Republic*, typically, cities have their own integrated transport system, as for instance in the case of the city of Karlovy Vary, where TCKV, a single company owned by the local Municipality supplies urban public transport services in a uniform manner. In *Hungary*, contract tendering is not applied to public transport providers; in many cases there is no tender at all, or only one participant applies, such as *Hiános*, the only provider for decades in the city of Sopron. Currently, in the entire country there are 17 State-owned and financed public transport service providers, without a regulatory framework that could create adequate conditions for the entrance of new competitors. In *Poland*, most transport companies are private entities owned by the municipalities, with no competition, no separation between regulator and regulated parties and between owner of the infrastructure and the service operator.

In *Italy* is found a paradoxical coexistence of two conflicting theories: 1) a national regulatory framework that since 1997 has always imposed competitive procedures for the award of the service; 2) a factual situation which has seen over the last twenty years very few races, preferring direct procurement procedures and in-house providing. The performance is not always satisfactory, both in terms of quality of services and their cost to the community (<sup>1</sup>).

Considering the *Italian* legal system, the regulation of local public services has undergone several amendments aimed, in particular, to harmonize national legislation with EU principles.

The first internal discipline of local public services was contained in “**Testo Unico delle leggi sull'ordinamento degli Enti Locali**”, Decree. no. 267/2000 (Tuel): in particular, Article. 113 governed the procedures for management and awarding of local public services in the field of protection of competition, which, however, did not apply to the local public transport sector, governed by Legislative Decree no. 422/1997. Since 2000, local mobility services have been devolved to regional governments and local administrations that received fully power in planning, awarding concessions and in the organization of the sector (Di Giulio, 2001; Arabia et al., 2004; Bucci, 2006; Guts, 2013).

The Law of 28 December **2001, n. 448** amended Article. 113 of Tuel and inserted Article. 113-bis. The latter provision introduced the distinction between “services with industrial relevance” and services “without industrial relevance” (words replaced by Decree-Law of 30 September **2003, n. 269**, with that of public services “economically significant” and public services “without

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<sup>1</sup> For the analysis of the Italian LPT regulation, see more on [http://www.agcm.it/component/joomdoc/allegati-news/IC47\\_executive%20summary.pdf/download.html](http://www.agcm.it/component/joomdoc/allegati-news/IC47_executive%20summary.pdf/download.html) and on <https://www.senato.it/service/PDF/PDFServer/BGT/00978532.pdf>

economic significance”), subjecting the first one in the competition regime with public procedures, and providing for the latter the direct assignment.

Afterwards, the Constitutional Court, in ruling no. **272/2004**, has declared the unconstitutionality of Article. 113-bis (Tuel), because such services -without economic significance- do not concern the protection of competition (as for the services with economic relevance) and therefore the relative discipline is not within the State jurisdiction provided by Art. 117 of the Italian Constitution.

This gave rise to a lack of discipline of services without economic relevance, not even filled by art. 23-bis of Decree Law n. **112/2008**, which expressly refers to the services economically relevant with the aim of encouraging the spread of the principles of competition, freedom of establishment and freedom to provide services. The latter legal provision, also applicable in the field of local public transport, introduces: a) the principle of public tender as a general rule for SIEGs awarding; b) the possibility of relying on a mixed company with a “double object selection”: to allocate the service and to choose the private shareholder, with a stake of not less than 40 percent and the commitment of specific operational tasks; c) the exceptional prediction of the in-house providing, subject to an opinion (not binding) of the Antitrust Authority and to the existence of “exceptional situations, because of the economic, social, environmental and geomorphological features of the territory, that do not allow an effective and useful recourse to the market”. Furthermore, Article. 23-*bis* also ordered the tacit repeal of the provisions of Article. 113 of Tuel where incompatible with the new provisions.

On the issue of procedures for the award of public service, the Italian Constitutional Court has intervened with judgment no. **325/2010** stating that the introduction in the national law of stricter competition rules than the minimum required by EU law is not imposed by the European system, and, therefore, “it is not constitutionally obliged, under the first paragraph of Article. 117 of the Italian Constitution. [...], but neither is contrary [...] with [...] European law, which only constitutes a minimum standard, mandatory for Member States.

Article. 23-bis was subsequently repealed, following the outcome of the **referenda** on 12 and 13 June 2011. However, the provisions of Article. 113 of Tuel, are not yet back to relive (as expressly stated by the Constitutional Court ruling no. 320/2011).

The lack of laws as results of to the referendum has led the Government to intervene in the sector with Article 4 of the decree-law n. **138/2011**. According to this provision, generally, the management of local public services of economic interest should be left to the free private economic initiative (competition in the market), with the possibility for local authorities to introduce exclusive rights in favor of determined operators identified through tender procedures (competition for the market). Alternatively, it was possible to award the services to mixed companies, with “double-object” selective tendering. Finally, if the economic value of service was less than € 200,000 per year service, the local authority could proceed to an in-house commitment to a fully public company, without tendering.

On those the Constitutional Court intervened, with ruling no. **199 of 2012**, declaring the illegality of the provisions adopted under Article. 4 of Decree-Law no. 138 of 2011, mainly because direct to reintroduce the legislation repealed by popular will.

Most recently, Article 34 of Decree-Law no. **179 of 2012**, provides that, for all local public services of economic interest, regardless of the awarding procedures, the tenders would have to be preceded by a report, published on the contracting authorities’ website, which demonstrates the existence of the requirements foreseen by the European, and defines the specific content of the public service obligations, and the possible economic public compensations. It should not overlook, moreover,



Article. 8 of Law no. 115/2015 which amended the transitional provisions related to direct awards of local public services of economic interest, disposed by Article 34, paragraph 22 of Decree-Law no. 179/2012.

On this regulatory framework has intervened, finally, the **Riforma Madia**, and the **TULPS**, (Testo Unico dei servizi pubblici) of January 2016 <sup>(1)</sup>, and the new **Code of public procurement and concessions**, enacted in April 2016. Summing up, in the Italian system the local economic services of general interest could be managed in 3 different ways. On one hand, the service could be supplied by the **market** (e.g. awarding the service to a private provider through a competitive tendering procedure) or by a public-private company (private company under public managing and control); in this latter case through a procedure with “**double object selection**”: one to choose the private partner, the other to deliver the service. On the other one, it could be supplied through **direct commitment** (in-house providing) without previous tendering procedure, to an operator that is only formally different by the public administration that owns the service, but actually it is the direct operative organism of the latter. In particular, the provider has to be totally managed and controlled by public authorities that exercise a control that corresponds with the control of its own departments; and, at the same time, he has to carry out the essential part of its activities with the controlling local authorities.

On a closer view, in most large Italian cities like Rome (ATAC spa) and Milan (ATM spa) Municipalities have maintained a public governance in delivering LPT services, with some exceptions. Particularly relevant is the case of **Trieste**, that represents one of the few Italian examples in which LPT services are actually awarded through competitive tendering procedures. The delivery of the LPT services is guaranteed by a local operator, *Trieste Trasporti SpA*. This case represents an “anomaly” in the Italian system, because the second shareholder of the company is the International group *Arriva* (now acquired by Deutsche Bahn), which holds 40% of the capital. As regards **Genoa**, in 2005 the Municipality has privatized, albeit only in part, *AMT* (*Mobility and Transport Company*), the existing 100% public owned company which supplied the TPL service. In particular, for the first time in Italy, a French private company (*Transdev*) acquired 41% of the share capital of *AMT*, after a competitive tendering with “double object”. The opening of the Italian market of local public transport favored the entrance of a significant number of foreign companies, mainly from France, UK and Germany, large multinationals specialized in public utilities. This change regards, for instance, the urban area of **Florence** (with the French *RATP*).

Similarly, in **Germany**, regarding the organization of local road transport services, metro and trams, most of the main cities have their own operators to which the services are directly awarded. Sometimes, even some counties and smaller cities organize the service through their own companies, however, it is not the majority of cases. In regional and urban road transport, there is presence of many companies: Some are private owned companies, others are members of international groups, or very small that operate only on two or three lines. There are different forms of awarding LPT services, in accordance with the provisions of Regulation 1370/2007. Subcontracting is widespread in road transport service: About 30% of the LPT services are awarded using this procedure, through competitive tendering.

The **Austrian** legislation on public transport introduces a distinction between the national rail and road transport services and the regional or local ones. The organization of the latter are regulated by the federal Local and Regional Transport Act (*Öffentliches Personennah und Regionalverkehrs-gesetz – ÖPNRV-G* 1999), since 2000. It is established that the federal State (Länder) is

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<sup>1</sup> See more on <https://www.senato.it/service/PDF/PDFServer/BGT/00978532.pdf>

responsible for local rail transport, while the Länder and municipalities for local road transport. LPT sector is organized through a nationwide coverage of transport operators, gathered together into eight transport associations, along the German model of the “Hamburger Verkehrsverbund”. All the existing companies are able to engage in LPT, aside from their ownership (if private or public), even if most of them are spun off and organized under private law, but still owned mainly by municipalities (incorporated companies AG or limited liability corporations GmbH). Indeed, the largest LPT companies are fully owned by municipalities (altogether 667 companies in Austria for local and regional PT in 2003): 7 out of 9 Länder capitals use the concept of internal operators. Unlike the Italian case (city of Florence), international companies are not involved in the Austrian LPT system.

More in detail, in the largest Austrian cities LPT services are mainly supplied by private operators differently organized from city to city. In **Wien**, for instance, the *Wiener Linien* is responsible for all LPT service since 1999: Formally independent company under private law and fully owned by the city, it supplies the transport services through direct awarding without tendering. The latter is the preferable form of awarding in Austrian major urban areas, in which Municipalities own the companies. The relationship between the Municipality and the provider is regulated by a supervising and monitoring contract, that assigns to Municipality the power of giving instructions, as if it is a unique entity; the organizational model is an *in-house solution* in accordance with the EU law. While Municipality defines public transport policies in the territory, the services provider handle the local transport, the operative activities and also the infrastructures. The *Wiener Linien* provides most of the transport services itself but has also assigned transport services to private enterprises, promoting competitive tendering for 30% of local road transport and 50% of bus lines. As observed by Konstal (2016), the governance system of the LPT services in Wien (“Wiener Modell”) may certainly be regarded as an efficient and effective solution in terms of the transaction and organizational costs in connection with this structure (in a comparative study of the cities of Lyon, London, Stockholm, and Wien, “Wiener Linien” shows above-average efficiency in the provision of service). There is no evidence that a (more) privatized institutional arrangement of provision would lead to better governance, performance or quality of the specific public service mission in LPT in Wien.

Similarly, in **Switzerland**, and in particular in the area of **Zurich**, the urban transport system is governed by the ZVV (Zürcher Verkehrsverbund) Transport Federation since 1990, a public authority that operates as a holding company under the governance of the Canton of Zurich, fully financing the 8 transport companies and the transport system in the area.

c) Hybrid model: *mixed public-private* governance with competition between public and private providers

Observing the different systems developed in Europe, most European metropolitan areas and large cities make a choice between purely public and purely private forms of delivery. Local public transports, by road and by rail are private in almost all cities in England and most cities in France (Savage, 1993; Dàrbera, 1995; Labridge and Sealey, 2000; Amaral et al., 2006, 2009). On the other hand, in most cities in Germany, Italy, Switzerland, Austria, Eastern Europe and Spain - how analyzed below –, the service is provided by public companies. Competition between public and private suppliers is uncommon in European experiences. This latter form of governance has made some headway in a few of the largest cities of Europe, such as London, Paris, Wien, Scandinavian cities (e.g. Stockholm and Copenhagen) and cities in the Netherlands, which are generally more given to introducing a competition in product and services markets.

As for the **Scandinavian model**, since 2007 the implementation of the European Directive in the internal systems induced a relevant reform of the LPT sector. At the operational level, clear-cut separation of roles and a higher degree of contestability, with standardized selection process, small sized networks, high transparency, and *short term-gross cost* contracts, contributed to overtake the drawbacks of the previous model (Konstal, 2016). Traditionally in the Metropolitan Area of Copenhagen, Aarhus, Odense and Aalborg, the road transport service was supplied through *in-house* municipal companies. Since 1990, and even more in 2007, a structural reform reorganized the sector with a unique legislation, and the *Copenhagen Transport* began to award the services through short term-gross cost contracts. After the reform, in the Eastern areas of Denmark, different operators provide the local road transport sector, the first one was *Linjebus*. Since 1990 other foreign operators share the Danish market of LPT services: *Arriva* supplies 41% of the local road transport services.

Similar considerations could be reaffirmed for the **Netherlands**. In the last years the Dutch experience has seen substantial developments in transport policies, especially with the imposition of competitive tendering as governance model for public transport services. The new *Passenger Transport Law*, which came in effect in 2001, forced the public transport authorities, except for the four largest cities, to organize passenger transport services provision in area through *concessions* with a maximum length, and to tender out these concessions. Nowadays, the obligation to competitively tender includes the four largest cities, but only three of the four had started the tender process for bus services and one of them for rail services as well (Veeneman and de Velde, 2014).

Furthermore, in **Slovenia**, the governance model is based on mixed public-private ownership, in a competitive market with residuary regulation. Public transport services are supplied by concessionaires, based on a public-private partnership: the providers are selected through public procurement procedure, while the municipality sets the conditions for delivering the service.

The most important experience in terms of opening to the market and efficiency is probably the one occurred in **Barcelona**, Spain, that is the only large metropolitan area in Europe with a large-scale mixed public-private service organization. In spite of most of the largest Spanish cities, in which the local public transport service is provided by public firms entirely owned by Municipalities, Local transportation in the Metropolitan area of Barcelona is a *mixed system* in which one public operator (*Transports Metropolitans de Barcelona*, TMB) and several private companies that supply the transport service in different areas coexist. TMB is a fully publicly firm, owned by local governments, absorbing 75% of passengers, 62% of length of routes and 70% of vehicles; while a group of much smaller private concessionaires, increase for relevance in the last years, connect the suburban areas with the city centre. Moreover, a local regulatory agency (*Entitat Metropolitana del Transport*, EMT), created in 1987, formed by representatives of all the municipalities covered by the service, is responsible for awarding and regulating concessions to LPT providers.

The Barcelona model presents a lot of advantages in terms of efficiency, as underlined in recent studies (e.g. Albalade et al., 2010), which suggest that – if it is real that mixed public-private provisions of bus services may reduce scale economies – it helps to discipline operators: The presence of *public* operators gives the regulator information about costs and demands that is useful for overseeing private operators, and may also help to protect passengers' interests in areas of demand. Conversely, *private* companies are useful to identify the inefficiencies of public firms and to moderate the demands of public employees.

### 2.3. The EU legal framework

The absence of clear and homogeneous rules at Member States' level governing the awarding of LPT services gives rise to legal uncertainty and obstacles to the free provision of local transport services and causes distortions in the function of the internal market. As a result, economic operators are being deprived of their rights within the internal market and could miss out important business opportunities, while public authorities may not find the best use of public money so that Union citizens benefit from quality services at best prices. The existence of an adequate, balanced and flexible legal framework for the awarding of LPT would ensure effective and non-discriminatory access to the market to all Union economic operators and legal certainty, favoring public investments in infrastructures and strategic services to the citizen

This is the economic, political and social background in which the European Union has to intervene. But unlike other sectors, such as electricity and telecommunications, in which EU directives have played a crucial role in the liberalization process, the impact of European legislation on LPT sector has been restricted on the general principles elaborated by the EU Treaty, about equality of treatment, transparency, proportionality, and mutual recognition. Indeed, as seen in *Table 2*, LPT services are neither subjected to the EU Services-Directive 123/2006, nor to the Directive 2014/23/UE

These exceptions entail a limited influence of the EU in LPT sector. Local authorities can provide services themselves or decide to contract them out, through competitive tendering procedures.

Public passenger services by	(Public) service contracts as defined in Directives 2014/24/EU and 2014/25/EU	Service concessions as defined in Directive 2014/23/EU
Bus and tram	Directives 2014/24/EU and 2014/25/EU	Regulation (EC) No 1370/2007
Railway and metro	Regulation (EC) No 1370/2007	Regulation (EC) No 1370/2007

*Table 2. Summary of the applicable legal basis for contract awards by type of contractual arrangement and by transport mode*

In this field, the European Union Regulation 1370/2007/EU <sup>(1)</sup> is the main EU source of law. The purpose of the EU law is to define the conditions in which the competent authorities can intervene in the area of public passenger transport (rail and road transport), to guarantee its provision in the context of of Services of General Interest and to ensure the provision of higher service frequencies, better quality and/or lower fares than the market would otherwise provide.

More specifically, it sets out the conditions under which authorities should compensate the service provider, and the mechanisms to be applied by public authorities to award public services contracts to a third party, other than an internal operator, by means of transparent and non-discriminatory competitive procedures which may be subject to negotiation. It establishes that, subject to certain reservations detailed in Article 5 of the Regulation, competent local authorities may provide public transport services themselves or assign them to an internal operator over which they have control comparable to that over their own services.

<sup>(1)</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3A124488>

To resume, these provisions seem to reproduce the legislations of some Member States. Indeed, Local authorities can produce services themselves (in self-production or in house-option), in which competitive procedures are not required, or decide to contract these out by means of competitive (or negotiated) tendering procedures.

<p><b>Belgium, France, Italy, London, Spain, Eastern Europe: most predominant PUBLIC INITIATIVE</b></p> <p><b>Austria and Germany: formally MARKET INITIATIVE but dominated by authority owned companies with exclusive right to serve the market</b></p> <p><b>UK-outside London: FULL DE-REGULATION, open entry market initiative (without exclusive rights) where public authorities just keep a complementary role</b></p> <p><b>Cities of Paris, Velenje, Barcelona, Scandinavian model: MIXED PUBLIC-PRIVATE OWNERSHIP with coexistence of public and private providers that award the services through competitive tendering procedures</b></p>
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Table 3. Public or private ownership in terms of LPT provision in the European Member States

An interesting recent Report of the European Commission published in February 2016 - “Study on economic and financial effects of the implementation of Regulation 1370/2007 on public passenger transport services” demonstrates that Regulation has affected the approach to service provision of most Member States, as it can be deduced from Table 3 above. In particular, in a limited number of them, Regulation has allowed a more flexible approach to the award of contracts than was previously the case under the relevant national legislation. For example, in Italy it is now possible to award contracts directly, whereas formerly authorities were obliged to procure services through competitive tender.

### 3. Results of Comparison under a Critical perspective

From the comparison analysis that has taken place in Section 2, it can be said that in the last two decades, market-opening reforms promoted by the EU and adopted by the Member States in local public transport have impacted most European countries, but it is obvious that there is not “one” European LPT governance and organization model. At the same time, it is true that many countries and urban areas have introduced competition in the field of local public transport services, but this trend has not always been accompanied by consistent reforms of the legislation existing beforehand.

The comparison reveals that LPT systems in EU now operate under a broad plurality of organization forms with a high degree of variability in LPT arrangements that vary from public monopolies to open markets.

Furthermore, although in principal top down regulations in the EU provide Member States with instructions, the experience from them demonstrate variations not only among countries but also within the same country. These differences mostly affect the legal framework of the LPT service organization and the following main issues arise.

The first one is the issue of **multilevel-governance**: On the public administration perspective, the presence of at least three levels of government (local/municipal, regional/provincial and national), rounded by the European system, implies adopting

decisions not in isolation among each other, but in a cooperative manner, following a coherent approach (GUT's project, 2013). For Christiansen (1996), multilevel governance is defined as “non-hierarchical systems of negotiation, regulation and administration, going beyond the traditional acceptance of the hierarchical and sovereign State, as the ultimate arena for making decisions and resolving conflicts”. This mode of governance can be different according to countries and their territory in the management of the local public transport and might entail different level of regulation among EU and national regulation and probably federal/regional peculiarity as well.

For instance, in the **Italian** system, the “resiliency” of the regional regulation to the national policies of liberalization of LPT is an over-increasing phenomenon. In this field, it's interesting to investigate to what extent the European laws and principles regarding the four freedoms influenced the Member States systems. This comparison shed light on some closely related issues. One of the most compelling question is the interference of the European system in the policies of internal market of public services. This issue seems to point out the similarities and the differences between the economic regulation of the other member States and the fragmentation of the Italian one. Furthermore, this topic is particularly pressing in this period, with the adoption of the EU directive 2014/23/UE, due to the potential impact that this legislative intervention will have on the Italian system. Influence that seems to be non-trivial, as it results from the most recent Italian legislative reforms of the Public Administration (for instance, L. 124/2015, “Riforma Madia” and the “TULPS” of January 2016; or the new “Code of the Public Procurements and Concessions”, enacted in April 2016). In particular, the degree of effectiveness and standard application of the general measures taken by the Italian Legislator is evident, which inevitably pay a high rate of non-application, if not implemented by each Italian Region. The “resiliency” of the regional Italian legislators against the European policies, in the field of the LPT, is a phenomenon barely analyzed in the Italian studies. But, even if it is true that the matter of competition is the sole responsibility of the State in its wholeness, the Italian Regions play a central role in the perspective of liberalization. Indeed, the Regions dictate the specific rules applicable in practice in the different economic sectors, and they could supersede the national ones.

Secondly, it is necessary to underline the issue of **durable contracts**. Observing the Member States' systems, it seems to be pointed out that concessions are usually long-term and complex arrangements in which the concessionaire assumes responsibilities and risks traditionally borne by the contracting authorities and contracting entities and normally falling within their remit. The main reasons of this trend could be identified in the widespread perceptions about economic and social consequences of the duration of the concessions. The length of the contract is an increasingly pressing issue from various points of view (Gagnepain et al., 2013). If the contract is too short, then the private operators will not have any incentive to invest on its business. On the other hand, with long-term contracts it could be very difficult for the local authorities to stop collaboration with inefficient private operators. Still concerning contracts, a relevant point emerged from the literature involves the impossibility to provide complete contracts in the real word (Roy and Yvrande-Billon, 2007), i.e. contracts covering all the possible scenarios regarding the future management of the LPT service. Incomplete contracts may lead to a dominant position of the party owning the relevant transport infrastructure in the contracting procedure, and to a lack of a clear distribution of contractual obligations. According to Hensher (2007), however, incomplete contracts should be preferred to complete ones because they allow for market adaptation, while under complete contracts renegotiation is extremely difficult. The European intervention should not be underestimated by the Member States: in order to assure the opening of the market of public services to competition, EU imposes

short-term concessions and attributes the economic risk on the provider, as established by the Directive 2014/23/UE, about the awarding procedures of concessions of public services <sup>(1)</sup>.

Thirdly, the issue of **fragmentation** emerges more and more often in the internal market of LPT services. As revealed by recent studies, the provision of many utilities (telecommunications, electricity, water) entail important scale and density economies which mean that is efficient to give the exclusive right to operate the service to a single company. In the case of local bus transportation, however, the literature suggests that the provision of this service does not imply significant scale economies. As a consequence, it is possible to split the metropolitan areas of larger cities into separate routes or regions and to award them to different concessionaires. Indeed, no scale benefits seem to be lost when creating several concessions in a large metropolitan area (Franquelli et al., 2004; Hensher, 2003).

Related to the transport sector, it is necessary to underline two others critical areas: **The compensatory measures of the public service obligations and the public support to infrastructure financing** <sup>(2)</sup>. The award of economic benefits -through public resources- to companies providing public transport services, even at the local level, must comply with European guidelines on State aid. To ensure compatibility with European law must prove alternately that: a) there is not a benefit and it does not constitute a State aid, considering the conditions set by the Court of Justice Altmark judgment of 2003 <sup>(3)</sup>; b) the State aid falls under the “*de minimis* parameter”, so it is assumed that there is no impact on competition and trade; c) the State aid complies with the special provisions contained in the EC Regulation 1370/2007, which implements Article 93 TFEU.

- a) In order to exclude the existence of an aid, the Court of Justice in the Altmark judgment indicates two ways to exclude that the costs of an inefficient enterprise are taken as reference in the process of calculating public compensation. The first one is to select the service provider on the basis of a public procedure conforms to the European law in order to identify the candidate able to provide the services at the lowest cost. The second one defines the compensation with reference to the costs of an enterprise properly resourced and efficiently managed.
- b) If it is impossible to exclude the existence of an aid, the extent of public support is considered in line with European law (Art. 107, par. 1) in the event that it has not a significant impact on competition and trade. But, to fall within the “*de minimis* treatment”, which excludes the obligation to notify to the Commission, it is necessary that compensation is defined *ex ante*, in a transparent manner and does not exceed the thresholds laid down in Regulation (EU) No. 360/2012 (500,000 euro over three years).
- c) If the compensation constitutes an aid and does not fall within the “*de minimis* criteria”, public authorities need to configure the extent of public supports to ensure their compatibility. In particular, as for public transport services, Regulation No. 1370/2007 requires that the compensation for public service obligations does not exceed what is necessary, considering the specific costs in managing the service.

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(1) Article 18, Directive 2014/23/UE. Duration of the concession.1. The duration of concessions shall be limited. The contracting authority or contracting entity shall estimate the duration on the basis of the works or services requested. 2. For concessions lasting more than five years, the maximum duration of the concession shall not exceed the time that a concessionaire could reasonably be expected to take to recoup the investments made in operating the works or services together with a return on invested capital taking into account the investments required to achieve the specific contractual objectives. The investments taken into account for the purposes of the calculation shall include both initial investments and investments during the life of the concession.

(2) See more at “Istituzioni e regolamentazione dei trasporti:temi di riflessione”, rapporto dell’advisory board – 2015, in <http://www.autorita-trasporti.it/wp-content/uploads/2015/12/rapporto-advisory-board-2015.pdf>

<sup>3</sup> ECJ, July, 24, 2003, case C-280/00, *Altmark Trans GmbH and Regierungspräsidium Magdeburg v. Nahverkehrsgesellschaft Altmark GmbH*.

According to the provisions of the Altmark judgment, examined above, and considering the legislative lack in this area, the European Commission regulate the sector in a coherent and organic manner. The Commission has adopted two policy packages: the “Monti-Kroes package”<sup>(1)</sup> of 2005, then replaced by the “Almunia package”<sup>(2)</sup> of 2011-2012, with a deeper development of the issue, in the broader context of the modernization of the framework on state aid.

The “Monti-Kroes package” specified the conditions under which State aid -in the form of public service compensation- were compatible with the EU Treaties. In particular, on the one hand, they were specifically identified certain cases in which it was not required prior notification of the aid (art. 108, par. 3 TFEU); on the other hand, for the aid still subject to the notification, were shown the compatibility criteria.

Since 2008, there is a need for greater clarity in the field of state aid and, more generally, about the proper functioning of competitive dynamics. In December 2011, the Commission adopts a Communication to ensure the quality of SGEI in Europe, as well as a new set of rules on state aid, called Almunia package<sup>(3)</sup>, which replace the decision and the statement of the previous Monti-Kroes. With these measures, the Commission has further clarified the basic principles relating to state aid and has introduced a more diversified and proportionate approach, with simpler rules for local SGEIs and for SGIs. In addition to, confirming the importance of SGEIs for economic growth and social cohesion, the Commission sought to ensure the effective use of public resources for SGEI, also considering the need of public finances consolidation in the Member States. It has also introduced a more severe treatment for the aid that seem to be potentially distortive for the competition rules.

The fifth aspect to keep in consideration regards the issue of **ownership**. As it has been underlined above, the EU is neutral to ownership and treats public and private enterprises as equal entities. Indeed, contracting authorities and contracting entities should be allowed considerable flexibility to define and organize the ownership and the procedure leading to the choice of concessionaire.

Boitani et al. (2013) investigate if competition and ownership have a critical role in Total Factor Productivity (TFP) of firms, with a focus on local public transport in nine European countries. They argue that public ownership affects drastically in a negative way firms’ TFP and that competitive procedures are linked to increased productivity. In addition to that, according to the authors, TFP tends to increase as ownership status moves from public to total private, with mixed firms placed in between. Nevertheless, they underline that by no reason they would suggest privatization as the best possible solution for every context, as this strongly depends on other factors that were out of their study’s scope such as contractual design.

Another research by Ottoz et al. (2009) examined the impact of ownership on the cost of bus service provision, with a focus on Italy. The results indicated that higher density and scale economies are more likely to occur in private companies, rather than public ones. In addition to that, cost inefficiencies are more often in public entities as well.

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<sup>1</sup> The “Monti-Kroes package” is a set of soft law acts, adopted by the European Commission to harmonize the SGEI Framework indicating the developments in Altmark case law: a) Communication n. 2005/C 297/04, in G.U.U.E. C 297/4, November, 29, 2005; b) Decision C(2005) 2673, in G.U.U.E. L 312/67, November, 29, 2005; c) Directive n. 2006/111; d) Commission staff working document – *Frequently asked questions in relation with Commission Decision of 28 November 2005 on the application of Article 86(2) of the EC Treaty to State aid in the form of public service compensation granted to certain undertakings entrusted with the operation of services of general economic interest, and of the Community Framework for State aid in the form of public service compensation* - Accompanying document to the Communication on “Services of general interest, including social services of general interest: a new European commitment” COM(2007) 725 final, SEC(2007) 1514, SEC(2007) 1515.

<sup>2</sup> More specifically, the Almunia package on state aid for SGEI is composed of four documents: 1) Communication n. 2012/C 8/02; 2) Regulation n. 360/2012 on “*de minimis treatment*”; 3) Commission Decision n. 21/2012; 4) Communication n. 2012/C 8/03, “*framework*”.

<sup>3</sup> See more in PESARESI N., SINNAEVE A., GUIGUE-KOEPPEN V., WIEMANN J., RADULESCU M., *The New State Aid Rules for Services of General Economic Interest (SGEI): the Commission Decision and Framework of 20 December 2011*, in *Competition Policy Newsletter*, 2012/1, [www.ec.europa.eu/competition/publications/cpn/2012\\_1\\_11\\_en.pdf](http://www.ec.europa.eu/competition/publications/cpn/2012_1_11_en.pdf).



Many works have attempted to deal with the previous issue of ownership by investigating the connection between alternative forms of governance in LPT service provisioning and their efficiency, as measured in terms of performance, operating cost savings, consumers'/citizens' satisfaction. Most of them focus mainly on the differences between public and private ownership; they compare a number of transport systems categorising them according to organizational types and use a number of performance indicators to estimate efficiency.

However, the econometrics model used in these studies, generally, provide a macroscopic point of view and do not represent the political, social and economic context of the single territory analysed that vary among the different governance systems of the EU. The aim of this paper is to evaluate the role of government-owned enterprises in the market from a different perspective that highlights the relationship between the organisation of LPT service and the **quality of the Institution**. On the other hand, to understand the effect of a good or bad administration on the efficiency of the LPT service model of governance, it is necessary to investigate the different **characteristics of territory** of the cities and to contextualize the analysis into the socio-economic and political framework of each urban area.

These mean that in defining the concept of local public transport, it is relevant to distinguish among metropolitan areas with or without metro; passengers transportation by rail or by road; small (urban) or medium (inter-urban) territorial scale (Zatti, 2012). Also the ways of transport assume critical relief: Road transport on rubber wheels (Bus, local or Intercity one, like transit bus, electric bus); on tram rails (cable car, tram); suburban rail (metro, commuter rail); vehicles for hire (taxicab).

The last issue to examine in this paper regards the **several forms of contracting the LPT service** and their incidence on provider performances. And just from the latter it is necessary to begin.

### 3.1. Forms of contracting the LPT service and provider performances

The previous sections highlighted the differences in the institutional frameworks across different EU countries. At the local level, the organization of LPT may follow alternative forms of governance, each of them characterized by different levels of market liberalization, as shown in the Figure 3.

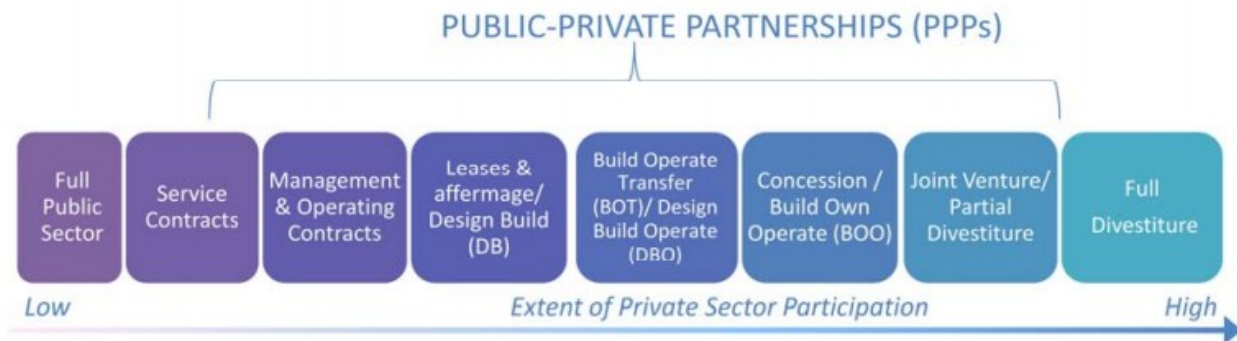


Figure 3. Different business models of private sector participation (Ang and Marchal, 2013).

A broad literature pointed out that, under alternative schemes, the behavior of private providers and public bodies involved in LPT is subject to different sets of incentives. The latter may lead to free-riding issues, as discussed for instance by Hensher et al. (2007).

According to Karlaftis and Tsamboulas (2012), when measuring social welfare in public transport, in terms of efficiency and effectiveness, the selection of the methodology can have a crucial impact on the results. Case specification is more observable in the latter factor; different methodological approaches can lead to very different findings and hence policy recommendations.

Summing up, we can divide the forms of allocation of LPT services into two main groups, as shown in Figure 3: The ones descending from market initiatives and those from authority initiative.

In the case of market initiative, we may have a (almost) fully liberalization, where the open entry of the service providers is regulated by a light mechanisms of rules. Regulated organization, on the other hand, requires a stricter involvement of the public authorities in the definition of the market openness and the mechanisms regulating market entry.

Following the authority initiative may lead to direct public management, the solution mostly chosen in Southern EU countries. As an alternative, local authorities may choose external mechanisms of regulation and contractualization. If it is kept in-house, no competitive tendering is carried out. If it not the case, i.e. if the public bodies select an external provider in an optimal way, competitive tendering is the main solution to allocate the service. The terms of the contract object of the franchise may lead to very different scenarios and relationships between the parties involved.

Van de Velde (1999), classifying the different organizational forms in LPT provision, suggested that a major role is played by the ownership of the asset. On one hand, in fact, only incumbents' firms can properly evaluate the depreciation of the physical assets. Moreover, defining ownership in the case of LPT is extremely complex since the network is made up by several assets, from the bus fleets, to the metro lines and stations, to the warehouse where to store the vehicles.

Yvrand-Billon (2006) claimed that competitive tendering is a myth, due to the lack of transparency of the attribution process and the limited monitoring capabilities of local authorities. A similar line of reasoning is followed by Hensher and Stanley (2008), whose idea is that social capital, in the forms of institutional quality and trust among individuals, is relevant in explaining the performance of different LPT forms of governance. Low-quality institutions, for instance, are not likely to supervise and regulate the private operators so to maximize social welfare.

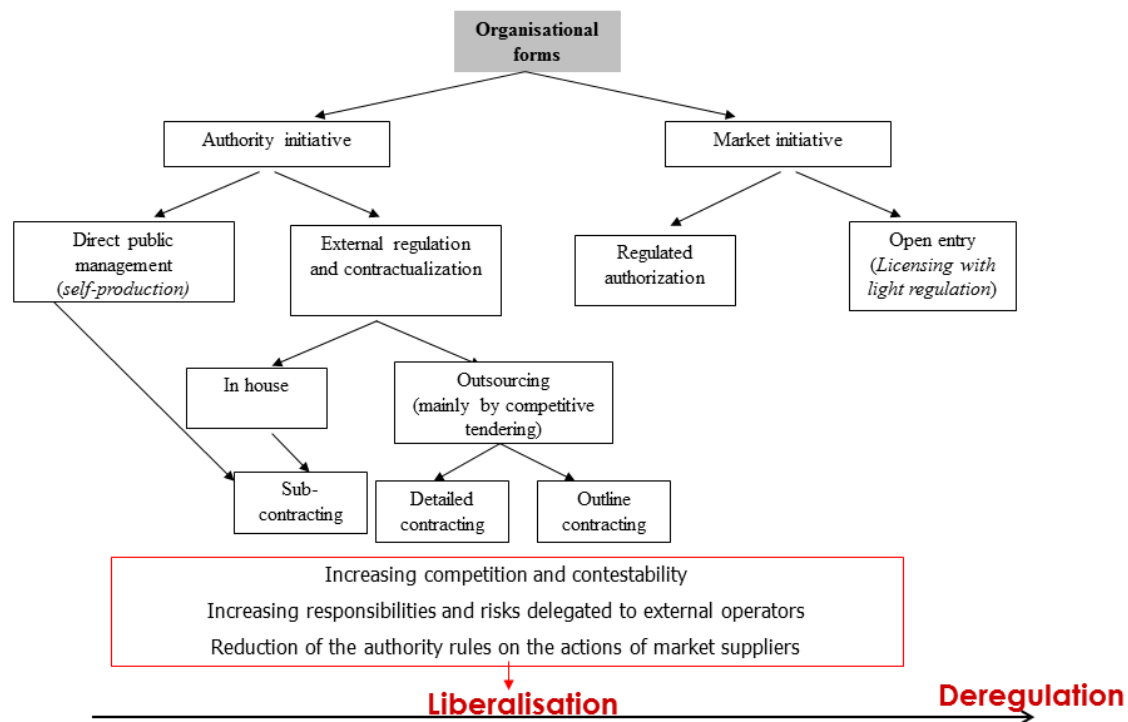


Fig. 4. Organizational forms in LPT. Source: Zatti (2012)

### 3.2. The role of Government-owned enterprises in the market of LPT.

The results from case studies in the European major cities suggested comparing and evaluating the different structure and organization of the LPT market to ponder the role of Government-owned enterprises in the market of LPT.

The widespread public involvement in the ownership of the companies that supply LPT (e.g. in France, Italy, London, Spain, and Germany) and the gradually decentralization of strategic, financial and organizational responsibility seem to be corroborated by the EU Reg. 1370/2007. Indeed, this regulation establishes that “At the present time, many inland passenger transport services which are required in the general economic interest *cannot be operated on a commercial basis; the competent authorities of the Member States must be able to act to ensure that such services are provided*”.

Even if it is true that regional and local authorities are more sensible and capable to assure the specific local needs, however, it's not appropriate to underestimate the potential drawbacks of these policy frameworks. The fragmentation of the governance and the lack of coordination between LPT providers and local authority, combined with reduction of national public funds to LPT, lead to a limitation to finance the social role of LPT services by the local government (Kostal, 2016).

Therefore, it is necessary to investigate if liberalization policies, on one hand, and the privatizing wave, on the other hand, combined with a necessary budget consolidation, could overcome the risks and achieve these requirements.

More liberalized market structures regard major cities located in UK-outside London, in which a de-integration model has been developed; in France, with “medium” degree of liberalization; and in Scandinavia. Only few countries have implemented a separation between internal and external actors; conversely in most countries the local authority influences the provider through ownership and/or financial relations. After all, no strict linkage between the observed financial problems and the degree of liberalization and privatization is evident.

Mouwen and Van Ommeren (2016) have proved that in the Netherlands, the effect of competitive tendering is completely absent, and this is interpreted by considering that in the country’s market the majority of concessions is tendered through competition. The authors also claim that the renewal of long-term contracts is associated to an at least 10% reduction of operational costs and moreover to a 7.7% rise in public transport ridership.

According to Schaaffkamp (2014), there is absence of strong evidence regarding if and how specific contract types can ensure success in passenger market. Furthermore, the author claims that notwithstanding that tendered contracts include strong incentives for cost reduction; they are not very successful in stimulating the operator’s interest in addressing the passengers’ needs and creating opportunities for the growth of LPT’s market share.

Finally, Filippini et al. (2015) attempt to identify and evaluate the differences in cost efficiency factor between bus lines operated under competitively tendered contracts and performance-based negotiated contracts in Switzerland. They applied regression analysis using cross-sectional data and concluded that no statistically significant differences are observed.

However the private-ownership structure model, typical mainly in GB and Sweden, and common in other countries but only for complementary and additional services (such as Austria, Belgium, Germany, Italy, Poland, and Spain) reveal the more and more involvement of private operators at different levels of the production chain: Suppliers of specific functions (cleaning, ticketing, advertising, etc.), sub-contractors of large monopolistic operators, route or small network providers or even large network providers, service initiators in commercially oriented approaches, partners in long term PPP models (Kostal 2016).

According to Kostal (2016), privatization is preferable in cases when transaction costs and the risk of opportunistic behaviours are outbalanced by production costs advantages. The same author considers that the primary advantages and disadvantages of privatization are the following:

Advantages:

- Increase of the internal efficiency of the provider, as the objectives are usually more clearly defined and strong motivation for managers and workers exist.
- Roles and interests of regulators and providers are less vague, which leads to more credible contracts and precise budget constraints.
- Consolidation of public finance

Disadvantages (from a public point of view):

- General public interest and operator's commercial objectives are not necessarily in line.
- Regulation is needed in order to protect the general interest, and this requires specific expertise and increases transaction costs.

Furthermore, as revealed by recent studies on the “Barcelona model”, the growth in the share of routes managed by private companies, coexisting with public ones in the same territorial jurisdiction, shows how privatisation is crucial for increasing the competition, allowing more operators to participate and make the competition more effective. Moreover, this hybrid organizational form, with the presence of private competitors on LPT market, seems to be a “credible threat” that may well stimulate improved performance among public managers and so escaping the classical public-private dilemma on governance (Albalade and Bel, 2010).

As for advantages of this mixed public-private model, through coexistence of private competitors governments are allowed to pursue different goals: it permits not only to compare public-private firms' production processes and costs, using benchmarking regulation with positive effects on their performances (Miranda and Lerner, 1995); or to reduce the entry barriers and the costs of regulation (Dalen and Gómez-Lobo, 2003); but also to increase the number of available service providers in the jurisdiction and thus fosters competition (Ballard and Warner, 2000). Ultimately, as pointed out by literature, mixed systems can improve efficiency in the local market, avoiding opportunistic behaviour by incumbents, provide information on the nature and the costs of the service and ensure government capacity to overreach contract failure (Warner and Bel, 2008).

### 3.3. *Citizens' satisfaction from LPT services across EU and how it is related to relevant policy reforms*

Earlier in 2016, Eurobarometer published a survey regarding the degree of satisfaction of EU citizens of the public transport system of the city they live. The sample included almost 12.000 inhabitants from 23 EU member states and the overall result was that although the average percentage of frequent PT users is not particularly high, the majority of urban dwellers (62%) appear to be satisfied with urban public transport. An impressively high percentage is met in Luxembourg (88%), followed by Latvia (83%), while the lowest appears in Malta (31%). Nevertheless, only 39% of survey participants claimed to be satisfied with the ticket prices offered by their LPT authority. Cities with very high percentage of citizens' satisfaction are: Zurich, Wien, Helsinki and Oslo, while at the opposite edge three Italian cities are placed: Palermo, Rome and Naples, followed by Nicosia. It is obvious that cities of the European South tend to be more dissatisfied with the LPT service offered to them, comparing to cities of Northern and Central Europe as demonstrated by Figure 4 and Figure 5 (European Commission, 2016).

In an attempt to interpret this phenomenon, it should be taken into account that citizens of Southern Europe tend to distrust the institutional authorities of their countries, due to the (real or perceived) increased levels of corruption. Therefore, it is not always a matter of whether for instance competitive tendering is the preferable option followed by the local authorities; the notion is if the citizens could be sure that the bidder who wins the contractual agreement is actually the best objective option according to the established criteria.

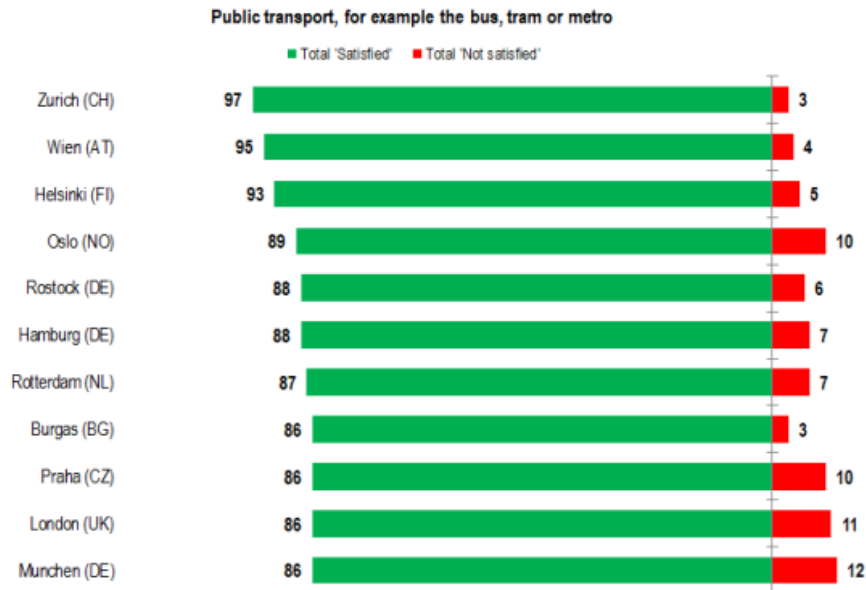


Figure 4. EU cities with a high degree of citizens' satisfaction regarding the LPT service (Source: European Commission, 2016)

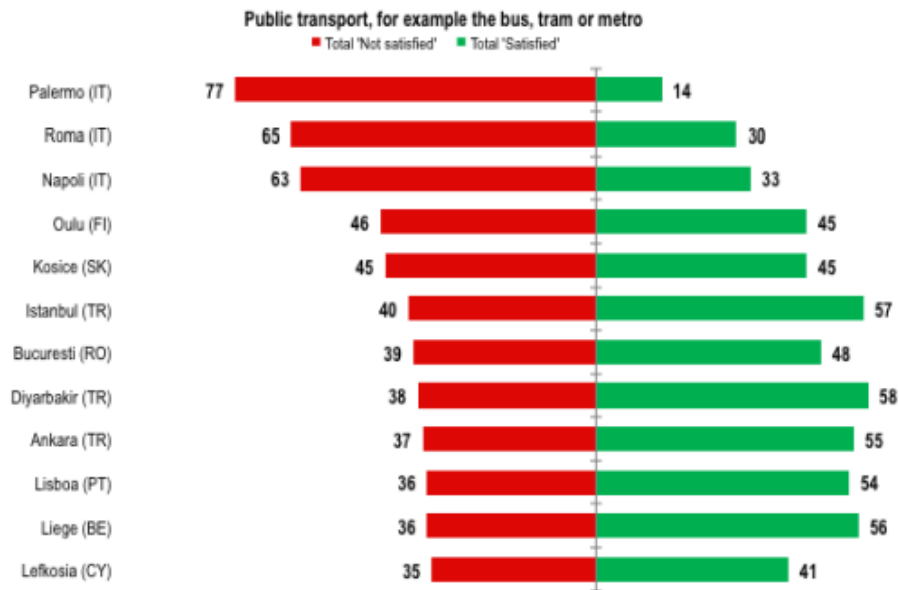


Figure 5. EU cities with a high degree of citizens' satisfaction regarding the LPT service (Source: European Commission, 2016)

Fellessen and Friman (2008) in their study pursue a transnational comparison of the perceived service satisfaction with LPT in nine European cities, namely Stockholm, Barcelona, Copenhagen, Geneva, Helsinki, Vienna, Berlin, Manchester, and Oslo. With the aid of factor analysis, four citizens' satisfaction dimensions were identified as being predominant in the majority of cities: safety/security, system (with supply and reliability items), comfort and staff behaviour. In a similar research with a focus on the

LPT industry in Greece, Botzoris et al. (2015), suggested the following four main components of user satisfaction: service organization, rolling stock (buses) equipment, bus stops facilities and equipment and drivers' capabilities and behaviour.

It should be underlined though, that the development of accurate and valid measures of service quality, as with all the things that involve perceptions and attitudes, is far from being an elementary task. Quality indicators are hard to be defined due to the fact that the attributes comprising perceived quality (such as safety and comfort) are mainly intangible and abstract and cannot be easily measured. This has to be taken into account while designing contracts of public transport, which include monitoring of LPT service quality. Therefore, acquisition of a better understanding of citizens' perceptions of quality of the service provided by public transport is very important (Beirao and Cabral, 2006).

Mouwen and Rietveld (2013) examined whether competitive tendering can improve customer satisfaction with local public transport in the Netherlands. They concluded that in the majority of concession areas, the average trip satisfaction has indeed experienced an increase within a 10-year period; nevertheless, there is still a 40% of cases in which a deterioration was reported. With a focus outside European cities, a recent research by Chunqin et al. (2016) proves the existence of a strong relationship between different organizational forms (e.g. ownership structure and contractual practices) and passenger satisfaction of public transport service in China. According to the authors, the highest passenger satisfaction is met when public transport operators are franchised to public ownership and are regulated by a management contract.

Fiorio et al. (2013), investigated the degree of correlation between user satisfaction and alternative organisational models of LPT service provision, based on the outcome of a survey conducted in 2009 in 33 European cities. They found that the presence of a single LPT provider is correlated to higher levels of citizens' satisfaction, in contrast with the existence of multiple providers that operate in the same market area.

#### 4. *Conclusions and Directions for further research*

The literature review in combination with empirical evidence indicates that there are no “magic recipes” for success. Every ownership and governance form has its own benefits and pitfalls, and the successful or not implementation of a policy reform is case-sensitive, due to the fact that it strongly depends on factors such as the socio-economic context of the city, the “corruption tradition” of the country, and the effectiveness of institutional authorities.

The “Barcelona” model for instance, which combines public and private provision of service as already described earlier in the paper, appears to be very efficient and seems to be able to contribute to the establishment of some so-called “win-win situations” between public and private entities, and at the same time it can succeed in keeping citizens satisfied. Nevertheless, this observation should not be translated as a “do it like Barcelona” advice; the analysis conducted for this paper shows clearly that a successful LPT urban governance model cannot be simply transferred to another city and expect it to be equally successful: case – specification is the key to success.

Most of the times, people seem not to be really concerned about the governance form, the institutional settings and the contractual details. They want a local public transport system characterized by efficiency, equity, sustainability and feasibility.

Local institutional authorities should inspire trustworthiness to their citizens. Establishing a sustainable urban transportation system to meet the changing mobility needs of citizens requires a comprehensive and integrated approach to policy-making and decision-making, with the aim of developing affordable, economic viable, people-oriented and environment-friendly local public transport systems. Urban space lies at the core of economic and social dynamics and new approaches and tools are essential to support European cities in facing their demanding futures.

Almost all decisions to be taken in life are inevitably intertwined with various criteria that more or less have to be taken into account. The decision – making process related to transportation planning issues -and particularly transportation policy issues- is intrinsically complex due to the fact that, in addition to the large number of factors (both quantitative and qualitative) involved, there are many different stakeholders that should be taken into account. According to the latest Urban Mobility Package of the European Commission (2013), citizen and stakeholder engagement should be promoted (Keseru et al., 2015). Therefore, citizens and stakeholders should definitely be given the opportunity to express their own views and aspirations on the topic, but particularly caution should be paid in order to eliminate the so-called “asymmetry of information”. An interesting direction for future research on the topic is thus to investigate how this engagement could be useful to decision makers in order for them to gain a better understanding on the relationship between the promotion/implementation of EU policy reforms in the local public transport sector and achieving citizens’ satisfaction with the LPT service provided.

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