Foreign direct investment in Italian local public transport

Cristina Bargero, Graziella Fornengo

HIGHER EDUCATION AND RESEARCH ON MOBILITY REGULATION AND THE ECONOMICS OF LOCAL SERVICES

HERMES

Working Paper n. 9/2010

Fondazione Collegio Carlo Alberto
Via Real Collegio, 30
10024 - Moncalieri (TO)
Tel: 011 670 5250
Fax: 011 6705089
info@hermesricerche.it
http://www.hermesricerche.it

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Cristina Bargero
Ires Piemonte
Via Nizza 18-10125 Torino
bargero@ires.piemonte.it

Graziella Fornengo
University of Torino
Dipartimento Cognetti de Martiis
Via Po 53- 10123 Torino
graziella.fornengo@unito.it

ABSTRACT. This paper first offers a global view of the geographic expansion of the LPT European Global players in the last three years in order to test (and reject) the hypothesis of a proximity effect. The methodology of case studies is then used to analyze three cross-board mergers in the Italian market of local public transport, named Arriva, Transdev and RATP. On the basis of several information sources (AIDA data base, financial statements of the firms involved, web sites, local authorities policies etc) we analyze the different strategies of entry in different local markets, looking first at the difference in the share acquired, and consequently at the extent of foreign control. Then, according to the literature, we try to explore the role of the different hypotheses moving the acquiring foreign firms.

Keywords: Foreign investments, Merger, Control, Local Public Transport

JEL Codes: G34, L32, L33, L92

1. Introduction

Under the EU Commission pressures, many waves of reforms interested LPT, as other SGI (service of general interest) in the European countries in the last decades. The process of liberalisation of LPT markets started in the 1970's in the UK and was followed at a more or less slow pace by other countries, aiming at improving the performances of their publicly owned enterprises, through some injection of competition in the SGI markets. They were of course in many cases such as the LPT looking at some form of competition for the market (both at Demsetz or yardstick competition) because of the natural monopoly nature of the LPT.

A second major wave of reforms took place in the 1980's and 1990's when some market liberalisation was accompanied by the privatisation process. The public enterprises were sold to private investors, sometimes reaching good results at least in terms of improved efficiency.

Currently a process of concentration is taking place in European LPT markets due to a wave of national and cross border mergers and acquisitions building up some large multinational utilities.

According to some Italian observers (AGCOM, Bank of Italy), this movement in the LPT industry could have positive effects on the efficiency of operating firms, because the industry in Italy is so fragmented that any restructuring could lead to the exploitation of scale and scope economies existing in the industry at least until the firms reach a certain dimensions[1].

In fact, in different European countries the restructuring process of the last decades has followed a pattern according to which the opening of the local markets has allowed a growing internationalisation of the national industry, mostly without reactions by the local operators.

The current crisis did not stop the process. AGICI registered 274 operations in 2008. However in Italy the number of operation has decreased from 93 operations in 2006 to

[1] See Ottoz, Fornengo, Di Giacomo 2008

92 in 2007 and 70 in 2008. According to AGICI the decrease is due to the reinforcement of the local public utilities mainly in the North and Central regions[2].

It is worth noticing [the fact] that until recently the concentration movement has mainly concerned the building of multiutilities, including highly profitable activities, such as water and energy, so that some European based multinationals like Veolia and Suez environment have become world leaders. The strategy of building up multiutilities firms seems now abandoned in favour of a concentration on the core business by the most important SGI operators in Europe. Horizontal integration across national borders is now preferred in many activities such as local transport[3]. So far, in fact, mergers and acquisitions have mostly interested four activities: gas, electricity, wastes and water. Only in more recent years local public transport has started to be concerned also in Italy[4].

In different European countries, mergers and acquisitions are usually instruments of strategies pursuing growth of the local firm. The Italian local services markets seem attractive for foreign firms, because the local monopolies guarantee a stability of the profit, even though they are poor as in the case of local public transport. While foreign players seem to enter the Italian markets mostly because of defensive reasons against the fear of a similar move from other strong players, the Italian firms do not seem [n]either to react against the foreign move [n]or to try to enter [in] other foreign markets. They try instead to strengthen their financial position by increasing their equity through the stock exchange.

In order to shed some light on the current expansion of European global players also in the local public transport area, still quite ignored in the literature, our paper is organised as follows.

First, we describe the international expansion of the major European [big] players in the local public transport industry by updating the data offered in 2006 by the UITP (Union

[2] Agici Finanza, Accenture 2008.

[3] Also in other transport activities as it is shown in Nomisma, Federtrasporto, *Scenari dei trasporti. L'internazionalizzazione del trasporto, la posizione italiana*, n. 11, june 2009.

[4] The emergence of mergers in a very well defined clusters by industry is documented by the evidence and suggests that industry shocks like deregulation are one of the most important catalyst for merger activity (Andrade, Mitchell, Stafford 2001).

International des Transport public)[5], taking information from websites of all the companies involved, looking also at their balance sheets. The same procedure has been followed for the countries concerned, with reference to the available statistics and official documents on their local transport reforms. In building up this general framework before examining the Italian case, we cannot verify through a statistical or econometric analysis the hypotheses usually formulated in the literature on the foreign direct investment in utilities because in local public transport the firms involved are very few so that we can only apply the methodology of case studies[6]. Even though without direct interviews it's difficult from our sources to know the reasons of the entrance of each firm in different markets.

However if we look at the relationship between the chronological path of the local transport liberalisation in different countries and the entry of foreign firms in each country, we can see a broad correlation. In other words, the entry of foreign firms could be a consequence of the specific shock produced by the liberalisation process and not only to the macroeconomic shocks produced by the entry in the European Union or in the Euro zone. In any case, the international expansion seems to be a better choice for growing by reference to the internal market expansion, because in the last case new market shares have to be contended to large competitors that are stronger than the foreign small competitors operating the fragmented markets.

In the existing literature on FDI in regulated industries[7] the internationalisation of these industries seems to be the effect of the macro shocks imposed by the privatisation and liberalisations reforms, which could also explain the waves of acquisitions and mergers occurring in some periods of time. At a microeconomic level the literature on industrial organisation tends to explain usually mergers and acquisitions with two hypotheses: the collusion hypothesis, because any standard economic manual could explain that trough an increasing concentration we can increase profits or the efficiency hypothesis, for seeking a better exploitation of scale and scope economies.

[5] UITP Organization and mayor players of short distance public transport, edition February 2006.
[6] Nicolini e Piscitello (2009) offer a statistical analysis of the effects of IDE in utilities, including all the SGI (services of general interest).
[7] Becher D.A., Mulherin J.H., Walking R., 2008.

The core of our paper is devoted to the Italian case and more specifically to the case studies of the three foreign companies now operating local public transport in Italy in order to detect on one side the reasons for their mergers with Italian companies and on the other to focus on the operating performances of the local firms involved pre and post merger.

First, we try to identify the common characteristics of the Italian firms acquired (size, ownership, performances, financial structure, markets share, etc.) and then we compare these characteristics after the merger. In such analysis we contrast a measure of the merger's profitability (ROE) with one base on the accounting data on the rate of return on investment (ROI). We compare also the pre and post merger performances of the acquired firms with those of independent firms in the same period of time.

The weak effects of the merger activity are usually associated with three different hypotheses:

- the synergy hypothesis, states shock from deregulation have led to larger and geographically broader deals in order to allow the utilities concerned to reach economies of scale and scope;
- the hubris hypothesis states that the freedom reached after deregulation allows more confident managers to more easily build empires via mergers;
- the collusion hypothesis argues that the larger firms and higher concentration tied to merger activity induce less competition in the industry.

A fourth hypothesis, less explored in the literature explains the pre-emptive mergers when being an insider is better than being an outsider, firms may merge to pre-empt their partner merge with a rival.

The conclusions will offer some suggestions to local public administration now involved in a complex process of setting the public auctions for the local public transport service.

2. The Italian administrative framework[8]

Local transport as other services whose production is contextual to the consumption cannot be traded across the national border. Foreign direct investment FDI can increase competition and produce positive effects on the local economy both within the same industry, trough imitation and demonstration effects, if the foreign firms are technologically and managerially more performing then the local firms.

Foreign investors could therefore produce positive effects on the efficiency of the acquired firms, which might exploit ownership advantages (Dunning, 1993) in acquiring many production factors (as fixed and financial capital, investment goods, technical and managerial knowledge) at prices lower than the market prices. They can also produce positive effects on the efficiency of the firms within the same industry - or even in different industries in the same geographical area- thanks to the technological and managerial spillovers caused by voluntary (or mostly involuntary) transfers of knowledge, apt to produce an increase of total or at least labor factor productivity in other local firms (competitors) that are pushed to increase their efficiency in order not to exit the market.

Existing literature on the effects of foreign direct investments on the local markets is usually developed with reference to the manufacturing industry, and rarely refers to the services[9]; moreover the results of the empirical analyses are often largely dependent on the units of observation chosen and on the methodology of evaluation adopted[10].

The European Commission has also in many documents remembered[11] that "*Community policies have significantly contributed to improving the quality, choice and efficiency of a number of services of general interest .... Indeed, the creation of an internal market has significantly contributed to an improvement in efficiency, making a number of services of general interest more affordable*".

Of course, the creation of a competitive internal market for LPT service cannot be attained through foreign trade – because we are dealing with an untradeable service. Foreign direct investments could increase competition in local market and produce

[8] It is quite similar to the French model described by Anna Yvrande Billon , 2006.
[9] Nicolini, Piscitello, 2009.
[10] Castellani, 2006.
[11] White paper 2004.

positive spillovers within the same industry because of imitation and demonstration effects, not to speak about workers' mobility, spin offs and backward and forward linkages[12], especially if investors are technologically and managerially more advanced than the local firms. Foreign direct investors could produce:

- positive effects on the productivity of the acquired firms which could exploit ownership advantages such as those mentioned by Dunning 1993 to buy production factors – including financial and physical resources;
- creation of externalities within the industry and outside in the same geographical area because of the pecuniary, technological and managerial externalities arising from the voluntary (or even involuntary) transfers of workers and technological and managerial knowledge, in such a way that the total or labour productivity of the local firms could be increased, because the local competitors challenged by the foreign investors try to be more efficient.

Within the European Union it is often pointed out that cross-border capital reallocation could be the result of the liberalization and privatization policies, which might explain the waves of the phenomenon often observed. Industrial organization literature underlines of course the forces at work at firm's level, named growth strategies, aiming at exploiting scale or scope economies, or asset seeking strategies, aiming at investing in local firms endowed with some valuable resources, such as in the LPT the relationships with the local administrations.

Local public transport, in Italy, has been analyzed through studies dealing with structure, efficiency and regulation, in the light of the Italian regulatory framework, started with Law 492/1997, according to the European Directives aiming at the liberalization and the privatization of public services, in the pursuit of a multiplicity of objectives. These included (i) promoting efficiency, on the often axiomatic assumption that "private companies tend to be more efficient than public ones", or, more elegantly, that "public ownership is … considered to reduce incentives for efficient resource allocation, both in terms of improvements in internal efficiency (cost-minimization) and

[12] For more details see Castellani and Zanfei, *Multinational firms innovation and productivity for the creation of externalities*, Edward Elgar, 2006.

allocative efficiency (pricing according to marginal cost)"[13]; (ii) increasing competition in particular sectors and in the economy at large; (iii) developing a national capital market; (iv) reducing public debt, as well as public deficit, especially in view of the adoption of the single currency; and (v) last but not least, promoting a culture of equity ownership amongst the population in general.

The privatization process of the previously publicly owned firm took place only in recent years mostly in the form of trade sales, i.e., the direct sale of an asset to a buyer through negotiations or a process based on competitive bidding, or to the choice of a private partner on the base of the same procedure. The process could be intensified in the next future due to law 135/2009. This new form of privatization is often considered as a "private-public partnerships" (PPP), especially popular since 2000 in all member states of the EU, and seems to start a new era of relationship between the public and private owners, in the public service sector, especially where physical infrastructure were involved. Public-private partnerships (PPP) have now also become a familiar tool to fund large infrastructure works. Compared to traditional public funding of infrastructure, PPPs are characterized by the relatively long duration of the relationship, involving cooperation between the public partner and the private partner on different aspects of a planned project (design, completion, implementation, funding).The public partner concentrates primarily on defining the objectives to be attained in terms of public interest, quality of services provided and pricing policy, and it takes responsibility for monitoring compliance with these objectives.

The liberalization and privatizations process of the local public transport market in Italy is going on very slowly, so that in many time the Italian Antitrust Authority (AGCM) had to signal that *"the local public transport in Italy shows three different barrier to entry: 1) continuous delays of the local public auction for the licensing of the service 2) calls for bid aiding the incumbents in different ways 3) the availability of rolling stock, when rail transport is concerned"*.

According to the Authority "*the consequences of the above mentioned market failures in the local transport markets to usually are not higher profits, but higher costs, because the existing monopolistic rents tend to be shared among different stakeholders-*

[13] OECD, 1995.

shareholders, employees, suppliers-and they all are interested to contrast the opening of competition"[14].

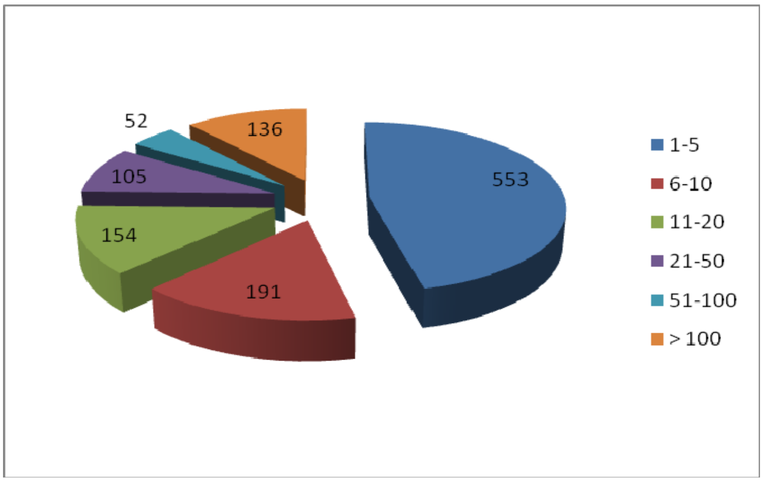
The local authorities are responsible for the competitive tendering procedure introduced for the assignment of franchised monopolies in LPT services; in particular they have to decide ex ante the organizational form and the boundaries of the service area, with particular attention to efficiency and economies of scale. The actual fragmented administrative framework, where competitive tendering remains a myth, could explain why foreign investors could have chosen different strategies in different regions[15], somewhere buying local public or private incumbent firms having the monopoly right to operate a route or a network of routes, somewhere participating to a competitive tendering. In any case local public transport has low fares slowly changing over time and high subsidies, so that any firm's expansion strategy is compelled to point at reducing costs instead of increasing revenues, often by exploiting the market position of the local firm.

The legal privatization of the previously public owned municipal concerns that took place many years ago gave more functional autonomy to the managers, the strategic control still remaining in the hand of the local public authority: the coordination between the public owner and the firm's managers objectives becomes more and more complex, because in the present difficult financial situation of the local public, budgets, the public owners, having the public service obligations, are incited to give more value to their assets both by transforming loss making firms in more profitable ones or selling minority shares to private local or foreign investors. The conventional LPT description, as it emerges from the National transport account, points out a very fragmented structure with small sized firms: about eight hundred publicly owned firms and three hundred private ones.

[14] AGCM AS453 - Considerazioni e proposte per una regolazione proconcorrenziale dei mercati a sostegno della crescita economica, Roma, 11 giugno 2008.

[15] Bianco M., Mele D., Sestito P. (2008).

Graph 1: Italian LPT firms by size



Source: CNT 2007

3. Major European Players in LPT

Among the European countries the competitive tendering for the assignment of local public transport services is becoming more and more frequent and at the same time the role of private firms is increasing with respect to the publicly owned ones.

The structure of the European LPT market is becoming more and more concentrated around the most important British and French players, namely the UK based Arriva and the French based Veolia, Keolis and Ratp. They all have intensified in recent years their acquisitions in other countries' firms enjoying a strong position in their local markets.

Arriva extended her network in Portugal and Spain, after having bought Veolia Denmark. In the same time, she increased up to 89% her share, in the local company operating bus services, in Hungary and Slovakia, and entered in a joint venture with a Polish firm operating rail cargo services. Her expansion in the home country continued with the acquisition o f the largest rail licensee the new cross country.

Veolia is diversifying her LPT business in France and in Germany, by acquiring a local rail licensee, and in Morocco, in joint venture with local partners operating public transport in three cities. She is also increasing her penetration in East Asian markets through joint venture with RATP and local partners in China India and South Koreas.

Transdev won the bidding for the privatization of the Belgian Connexxion, the major local operator. RATP, in the more recent past moving towards East, has recently developed her network in France both inside and outside Ile de France. Keolis, leader in the rail LPT both in France and in other European countries is also operating in bus transport.

The international expansion of the European mayor players seems to confirm the results of Courdacier *et al*. (2009), in a recent ECB paper, where they study cross border mergers of European firms in 10 industrial and 10 service sectors or the period 1985 - 2003. The gravitational model, adopted to study the location decision of multinational firms, explains the probability of acquisition of a target firm in a country J by a firm from country I in positive relation to the expected value the acquiring of firm profits and in negative relation of the transaction costs to be supported, included the financial remoteness of the market. The country I is worth noting for our purposes that the results differ in the service sector from the manufacturing one. To be more precise, whilst the European integration variable and the euro have a strong positive effect on cross border horizontal Mergers in the manufacturing sector, in the service sectors the state market regulations play a major role because only after the so called Bolkestein directive the European integration process is taking place and could gave birth to a wave of mergers also in these sectors. Investigating the role of geography, Courdacier *et al*. (2009) show that physical distance is not a barrier, because information technologies reduce dramatically information costs, but cultural and linguistic differences still matter. The ongoing privatization and liberalization policies in the services of general interest are of course much more important, and public ownership is not a barrier to mergers, because it usually accrues protection and reduces competition.

Table 1: Major players of public transport: global market

	Arriva	*Concordia*	*Veolia*	*First Group*	*Keolis*	*National Express*	*Stagecoach*	*Transdev*	*Ratp*
Country Europe									
Belgium			√						
Czech Republic	√		√						
Croatia			√						
Denmark	√	√							
Estonia									
Finland		√	√						√
France			√					√	√
Germany	√		√					√	
Greece									
Ireland			√						
Italy	√							√	√
Netherlands	√		√					√	
Norway		√	√						
Poland			√						
Portugal	√							√	
Serbia			√						
Slovakia			√						
Slovenia			√					√	
Spain			√			√			
Sweden	√	√	√						
Switzerland		√							√
United Kingdom	√		√	√		√	√	√	
Outside Europe									
Algeria									√
Australia			√					√	
Brazil									√
Canada			√				√	√	
Chile			√						
China									√
Colombia			√						
South Korea			√						√
India			√						√
Israel			√						
Lebanon									
Marocco			√						√
New Zeland			√						
Trinité and Tobago									√
USA			√	√		√	√		√

Source: web sites companies

Table 2: Major players: employees and revenues (2009)

Company	*Country*	*Employees*	*Revenue (mil. euros)*
Arriva	UK	44,000	3,463
Concordia	Norway	7,000	756
Transdev	France	46,500	3,265
Veolia Transport	France	83,000	6,059
First Group	UK	130,000	5,360
Keolis	France	40,000	3,170
National Express	UK	40,000	3,150
Stagecoach	UK	30,000	2,007
Ratp	France	45,315	4,317

Source: web sites companies

4. Three Foreign direct investors in Italy

How the three major foreign European players entered the Italian LPT sector? What are the direct effects on productivity and profitability of the acquired firms? In this section we analyze the three cases of the two public owned French firms Transdev, Ratp and the privately owned British Arriva and try to draw some conclusions in the light of the above described theoretical and administrative framework.

First we can remember that different opportunities for entering the Italian LTP market exist:

1. to submit a bid in a competitive tendering granting the exclusive right to operate a route or a network of routes;
2. to submit a bid in a competitive tendering aiming at selecting a private partner for transforming a publicly owned firm into a mixed (public-private) firm;
3. to make an acquisition, i.e.to buy shares of public or privately owned existing firms in order to achieve total, majority or minority control or even merge the target firm with the acquiring one control;
4. to sign different kinds of agreements with the existing firms[16].

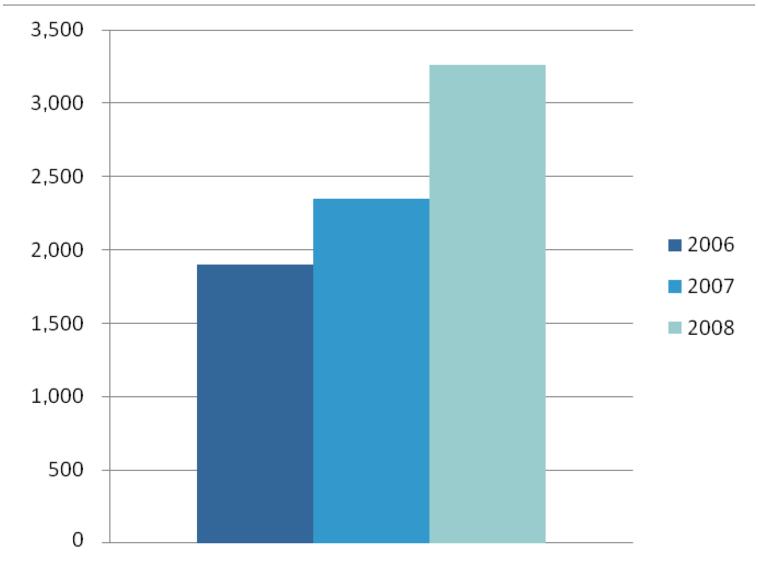
[16] In the words of AGCM. "*After the introduction of the legislative decree n. 422/97, the LPT sector has been, in fact, interested by a tendency towards cooperation among the several firms active in the single local transport basins, because of the future competitive tendering for the assignment of LPT services. Such tendency has meant a reduced phenomenon of external growth, as opposed to the birth of numerous alliances of operators active in different zones. These alliances have been sometimes formalized through agreements by which consortia or companies or temporary Associations have been created*".

The competitive mechanisms that could help the entry of foreigners or the growth of some actual incumbents toward larger dimensions requires public auctions both for the licensing of the service and the choice of private partner for existing public enterprises, but the process is very slow. Usually, where the competitive tendering took place, the selected final provider was the incumbent firms, sometimes joined with other firms, also foreign firm, in Consortia or temporary associations. Only the French publicly owned companies followed this way. RATP in 2002 obtained the attribution of operating the local public transport basin of Trieste for 10 years, together with other Italian firms in a temporary association. Transdev also successfully participated in the competitive tendering for three routes of the LPT in Rome in temporary association with Italian firms. However *The Italian Competition Authority* (AGCM) on 09/11/2005 opened an official investigation versus the participating LPT firms, to ascertain the anticompetitive character of the agreement. In 2007 the inquiry was closed finding a serious infringement of article 81 of the EC Treaty, because concerted practices among the participants had given rise to macro groups of undertakings at a national level. More recently Transdev was selected trough a competitive tender as private partner in the previously publicly owned AMT of Genoa.

The British private owned Arriva in most cases followed the way of acquisitions of minority or majority shares, both in private or public owned firms, sometimes after having signed different sort of agreements with them.

To conclude about the ways of entering in the Italian LPT market, we can remember that the fragmented industrial structure of Italian LPT is a reply to a fragmented administrative framework, which is now different according to each of our twenty regions, where the local administrative public authorities are in charge of local public transport. That is why foreign firms' entry strategies have to change, according to the different regions, and can go from simply preserving the existing market situation by acquiring the incumbent firm, guaranteed by appropriate safeguard clauses, to actively participating in competitive tendering in order to expand their activity. In fact the same firm could adopt either the first or the second strategy according to the different places or periods. It is worth noting that almost anywhere the foreign investors as the Italian firm participate in the temporary associations of firms. Before starting the analysis of the effects of their entry on the acquired firms let us briefly sketch the profile of the three foreign investors.

Graph 2: Transdev revenues in millions Euros (2006-2008)



Transdev originated in 1955 from a small company controlled with a 71% share by the Caisse de Depots[17] and after a long history of acquisitions in the French market became in 1990 the Transdev Holding. The international expansion began in 1997 in the United Kingdom with the acquisition of London United, and was followed in 1999 by the entry in the Australian market. In the following years the internationalization process involved many other European countries (Portugal, Spain, Germany, Netherland) and also Canada The international expansion produced always growing revenues (see Graph. 2).

Transdev is now the fourth LPT group in Europe, highly specialized in rail transport, but also in bus operation. In 2010 Veolia Environment and Caisse de Depots decided to merge their subsidiaries, in the field of urban transport, respectively Veolia transport and Transdev. The core business of both firms is urban transport and this horizontal merger will give birth to a giant group, Veolia-Transdev, with more than 130,000 employees, fifty-fifty controlled by Veolia environment, the operating partner, and Caisse de Depots, the strategic partner. In the year 2000 Transdev first entered the Italian market through a partnership with SINLOC (SanPaolo IMI group) to offer

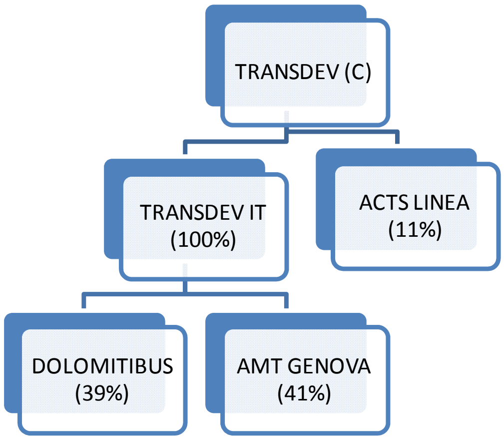
[17] The Italian Bank Intesa San Paolo hold a small share.

technical assistance to the Turin metro. Some years later Transdev also successfully participated in the competitive tendering for three routes of the LPT in Rome in temporary association with Italian firms[18]. The first Italian acquisition by Transdev was a 11% share of the ACTS Linea Spa, controlled by the Municipality of Savona and operating the urban network. The most important move was the submission of a bid in a competitive tendering of the Genoa municipality aiming at selecting a private partner for buying 41% of the controlled AMT (at the price of 22 million Euro) and the exclusive right to operate the local public transport network[19]. The provision of the service was at the moment the only business of the acquired firm, because the infrastructure and their maintenance had been given to a new firm called AMI, loss making and in financial distress, whose assets in 2008 AMT had to buy. In the same year Transdev acquired from his old partner Autoguidovie Italiane a share of 39.5% shares of Dolomitibus (whose control is now shared with Province of Belluno (49.9%) and Municipality of Belluno (10.6%).

To summarize, Transdev entered in the Italian LTP market in different ways according to the different regions. Today, Transdev subsidiaries are located in two regions – Liguria and Veneto – and the Italian revenues are estimated in about 80 million Euros. The public Transdev ownership seems to explain the preference toward previously public owned companies in Italy.

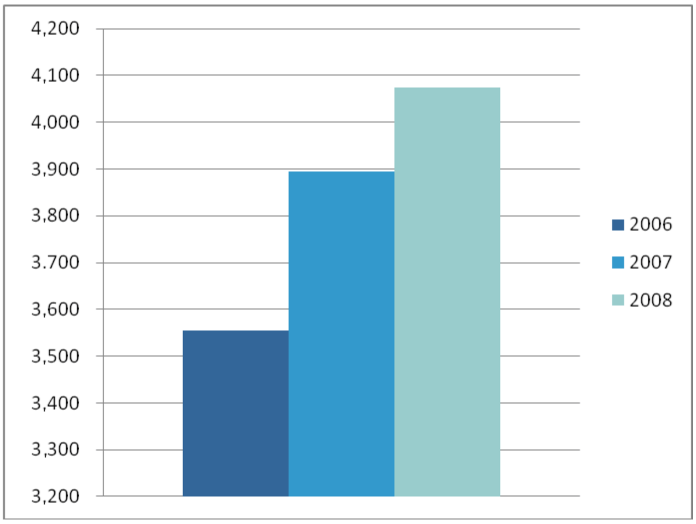
[18] And it was fined by the Italian Antitrust Authority for anticompetitive agreement with Italian firms and therefore serious infringements to the art.81 of the EC treaty.
[19] To be more precise the selection winner was TAG (95% Transdev and 5% Autoguidovie italiane, a private owned firm whose 40% control has been acquired by Transdev in 2005 and let in 2008).

Graph 3: Transdev subsidiaries



RATP is a state owned French company fast expanding abroad, mainly in non European developing countries, (see table 1) in Africa, Asia, South America and also in The United States, Switzerland, Germany and Italy. The increasing Ratp revenues (see graph. 4) come not only from the provision of the transport service but also from the construction of the transport infrastructure in many countries.

Graph 4: RATP revenues in millions euro (2006-2008)

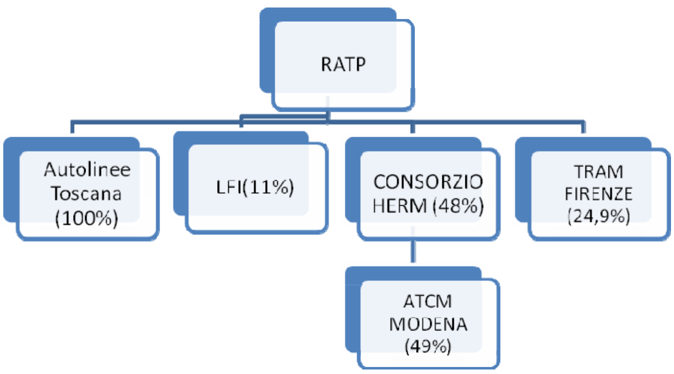


RATP, in the Italian LPT market, is geographically concentrated in the central regions, and more specifically in Tuscany. The first move was the acquisition of a local private firm in group with other Italian public owned firms, then followed by submission of bids in different compeitive tendering. The first move (in association with ATAF from Florence and Train from Siena, both publicly owned companies) led to the acquisition of a 30% quota of LFI, the private owned rail operator in Tuscany, that in turn owns 31.84% of Train shares an d a 12% control share of the Pistoia operator COPIT.

In partnership with ATAF (49%) RATP holds from 2005 a majority share (51%) of GEST, a company operating the first urban rail route in Florence. In association with the same publicly owned company ATAF (24.1%) and other italian shareholders RATP besides holds a quota (24.9%) of the company (TRAM di Firenze) charged to build two new urban rail lines of the LPT in Florence. At the end of 2007 RATP bought from a private family Autolinee toscane, a line of business operating the bus network of Mugello and Valdarno. More recently, at the end of 2009, in consortium (Herm) with other Italian partners RATP has been selected as private partner for ATCM Modena, obtaining a 49% of the shares and the full provision of the transport service.

In two other Tuscany's provinces (Arezzo e Siena) the RATP affliliates in association with local Italian partners built new Scarl (limited liability consortia)[20] to be assigned the provision of LPT in the provinces of Arezzo and Siena.

Graph 5: Ratp subsidiaries in Italy



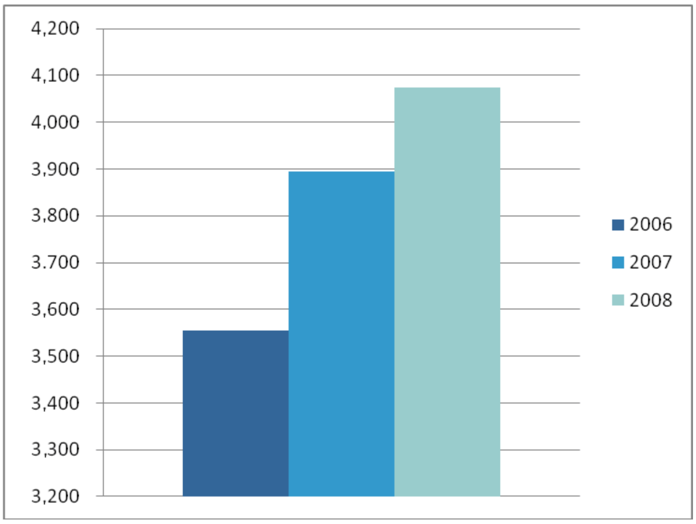
The geographical concentration in a single Italian region of the RATP expansion simplifies the administrative duties of the firm facing a unified regional framework and could offer the opportunities of exploiting scale economies.The provision of the LTP

[20] The new Limited liability consortia (Scarl) are a more stable group of firm than the old ATI (temporary groups of firms) because they have a definite governance.

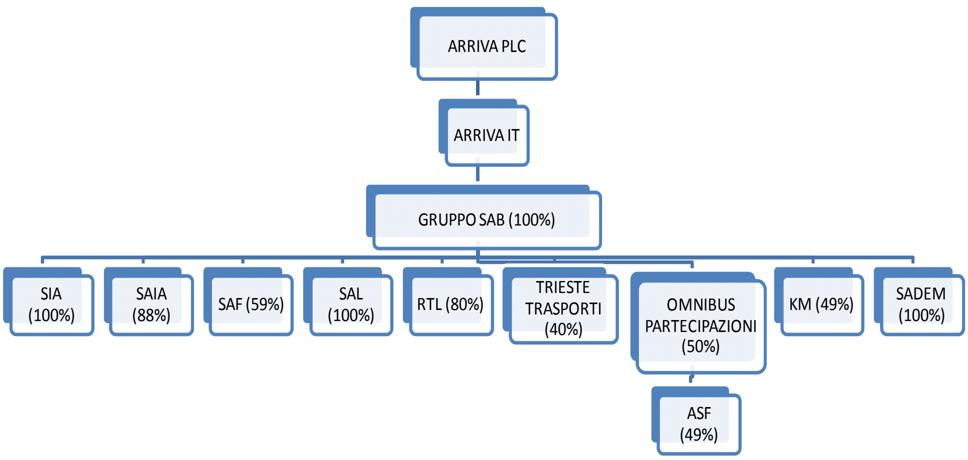
services in almost all the regional territory could also offer scope and density economies.

At the origin in 1938 the British private owned Arriva was not a firm operating in the LPT market, where it entered only in 1990, by acquiring a local firm. The international expansion started in 1996 in European countries and has now important shares of the LPT market in 9 countries (see table 2) and is the most important bus operator in London and the largest private operator in Italy and Denmark.

Graph 6: Arriva revenues in millions euro (2006-2008)



Graph 7: Arriva subsidiaries in Italy



The entry of Arriva in the Italian LPT market occurred almost always through acquisitions of private firms, mostly concentrated in a quite large geographical basin in the Northern Italy, including Piedmont. Aosta Valley, Lombardy, Veneto and Friuli-Venetia Giulia, so that Arriva is now the most important private group operating Local public bus transport in Italy.

The first move was in 2002 the acquisition from Italmobiliare at the price of 58 millions Euro of SAB Autoservizi in Bergamo, a private owned company holding several quotas in other LTP operators[21] that was the winner of different competitive tenders in other provinces of the same region. In 2004 Arriva bought 60% of SAF Udine (now SAB autoservizi FVG), operating in the region Friuli Venetia- Giulia. In 2005 Arriva bought two piedmontese private LPT companies, SADEM and SAPAV and in the same year increased the quotas in SAI up to 88% and in Trieste Trasporti (up to 39%) More recently, in 2009, Omnibus Partecipazioni (a company fifty-fifty controlled by SAB and FNM) bought 49% of ASF Autolinee di Como.

In 2009 a reorganization of the now numerous subsidiaries and affiliates of Arriva in Italia took place and the Arriva Italia srl was established to control 10 firms:

SAB Autoservizi – Bergamo
SIA Autoservizi – Brescia
SAL – Lecco
SAIA Trasporti – Brescia
KM – Cremona
RTL – Imperia
Trieste Trasporti – Trieste
SAF – Autoservizi F.V.G. – Udine
SADEM – Torino
SAPAV – Pinerolo (TO)
ASF Autolinee – Como

Some other legal operations took place within the group, the most important being the incorporation of SAPAV in SADEM in January 2010. The Arriva affiliates have also

[21] Sia Autoservizi in Brescia, SAL in Lecco, SAIA Trasporti in Brescia.

established many SCRL (consortia with limited liabilities) with other private operators to comply with the Lombardy administrative rule to be selected among bidders in the competitive tenders for the assignment of LPT services[22].

5. The Performances of the foreign LTP affiliates In Italy

This section tries to analyze the performance differential of the Italian LPT affiliates before and after the foreign acquisition on the basis of the accounting data included in the AIDA data base, part of the Bureau Van Dijk and eventually on the data offered by the balance sheets of the firms, when accessible in the firms' web sites. We use both measures of productivity such as the value added per employee and the usual indices of profitability (ROS, ROI, ROA and ROE) according to the AIDA definitions[23]. In the following tables we complete the picture of each firm by adding some measures of dimension (sales, revenues employment).

5.1 Transdev subsidiaries

Looking first at Transdev affiliates, we can see in table that the largest one, AMT Genova, after the foreign entry experiences in 2007 n improvement of the profitability indices, always negatives in the previous years. This result could be attributed to the reorganization imposed by the new investor, aiming at increasing sales and reducing costs. However the labour cost per capita is increasing and in the last available year (2008) also ROE falls to zero, due to the above mentioned operations with AMI. After the incorporation of AMI in 2009 the AMT profitability worsens; according to the first available data the last balance sheet shows a 2.3 million Euros loss, and an employment increase of 342 units, due to the incorporation of AMI's assets and employees.

[22] BERGAMO TRASPORTI EST scarl operates in Valle Seriana, nella Val Cavallina, nella Val Calepio and in Valle Camonica; BERGAMO TRASPORTI OVEST scarl operates in Valle Brembana, Valle Imagna, Val Serina, Val San Martino; BERGAMO TRASPORTI SUD scarl operates in Pianura Bergamasca; Trasporti Brescia operates in sub basin of Valle e Trompia – Garda - Valle Sabbia, Trasporti Brescia Sud operates in sub basin: Bassa Pianura Bresciana – Sebino – Franciacorta.

[23] **ROS,** operating income/sales + other revenues; **ROE**, net income/ total equity; **ROA**, net income/average total assets; **ROI** operating income/average total assets + obligations + debts.

Table 3: ATM Genova - Efficiency and profitability

	2004	*2005*	*2006***	*2007*	*2008*
Labour cost per capita*	42	42	43	44	51
Value added per capita*	34	37	45	48	55
ROS (%)	*-23.66*	*-16.03*	*-1.2*	*1.79*	*1.34*
ROA (%)	*-23.23*	*-13.45*	*-1.06*	*1.62*	*1.14*
ROE (%)	-	*-89.73*	*-17.74*	*6.61*	*0.0*
ROI (%)	-	-	*-8.61*	*12.64*	*9.28*
Revenues*	137,889	138,038	154,960	164,042	179,497
Sales*	54,046	54,363	53,848	58,057	56,599
Employees	2,627	2,181	2,181	2,177	2,144

*Thousand euros, **year of entry

Source: Aida database

The performances of the minority affiliate ACTS show the difficulties a foreign investor has to face in trying to introduce more efficiency in a LTP firm when the partners are either a municipality (Sanremo) or a publicly owned firm (GTT). As we can see in Table 4, the labour cost per capita is always increasing, even though the number of employees sharply decreases and consequently the value added per capita increases. The profitability improvements in 2008 seem more attributable to the revenues increase than to a cost reduction, due to the productivity increase.

Table 4: ACTS - Efficiency and profitability**

	2004	*2005*	*2006*	*2007*	*2008*
Labour cost per capita*	22	39	39	43	43
Value added per capita*	23	40	40	44	48
ROS (%)	*-0.43*	*-3.66*	*-3.62*	*-3.75*	*1.98*
ROA (%)	*-0.37*	*-3.36*	*-3.13*	*-3.11*	*1.48*
ROE (%)	*-12.62*	*-35.61*	*-90.47*	*n.s.*	*-4.52*
ROI (%)	*-2.42*	*-23.09*	*-16.42*	*-25.11*	*7.49*
Revenues*	17,670	18,032	18,538	20,979	21,650
Sales*	4,887	5,261	6,061	6,324	6,264
Employees	555	308	308	300	316

*Thousand euros, **Transdev holds a minority share from 2002

Source: Aida database

Table 5: DOLOMITIBUS - Efficiency and profitability

	2004	*2005*	*2006*	*2007*	*2008***
Labour cost per capita*	38	38	38	40	40
Value added per capita*	49	48	52	57	57
ROS (%)	*-0.72*	*-1.47*	*1.32*	*3.39*	*1.9*
ROA (%)	*-0.36*	*-0.71*	*0.69*	*2.01*	*0.94*
ROE (%)	*0.03*	*0.87*	*-0.99*	*1.64*	*0.47*
ROI (%)	*-0.97*	*-2.14*	*2.14*	*4.92*	*1.99*
Revenues*	17,931	19,644	21,453	22,564	23,419
Sales*	14,908	16,294	17,401	18,283	19,422
Employees	223	231	226	226	219

*Thousand euros, **year of entry

Source: Aida database

The recent acquisition of a 39% quota in Dolomitibus, whose partners are as usual Public authorities (Province and Municipality of Belluno) is addressed to a LTP firm whose performance indicators are better than in the other case, at least because in more recent years the company is making profits**.**

To conclude the analysis of the Transdev affiliates performances, it seems that the public private partnership recently suggested by the European Commission is not the best way to reach efficiency.

5.2 RATP subsidiaries

The Tuscany subsidiaries of RATP operate both rail and bus LPT, so that their performances are not perfectly comparable. Besides, the RATP shares are different and the entry occurred in different years entry occurred in 2002. That is why their performances from 2005 to 2008 don't show the consequences of the foreign investor's entry, either because in a very short period it is difficult to reorganize any firm or because a minority share doesn't allow a remarkable influence on the firm's management. LFI is a previous privately owned rail operator in Tuscany, which owns 31.84% of Train shares an d a 12% control share of the Pistoia operator COPIT. As we can see in the following Table 7 LFI was in the period pre-RATP entry a quite well performing firm, with increasing sales and positive profitability indices, because of a good improvement of the labour productivity.

Table 6: LFI - Efficiency and profitability **

	2005	*2006*	*2007*	*2008*
Labour cost per capita*	43	44	45	45
Value added per capita*	49	52	59	58
ROS (%)	*-2.14*	*-3.49*	*2.57*	*4.12*
ROA (%)	*-0.54*	*-1*	*0.87*	*1.6*
ROE (%)	*-0.37*	*-0.37*	*0.69*	*1.7*
ROI (%)	*-0.91*	*-1.58*	*1.41*	*2.84*
Revenues*	22,426	22,414	23,313	28,548
Sales*	25,023	25,278	27,072	34,158
Employees	286	285	285	369

*Thousand euros, ** In association with ATAF from Florence and Train from Siena, RATP acquired a 30% share of LFI, holding a 11% share

Source: Aida database

AUTOLINEE TOSCANE results from the breakup of a line of business operating the bus network of Mugello and Valdarno, previously belonging to a private owned firm called Florentia Bus.This is the reasom why between 2007 and 2008 the dimensions of the firm sharply decrease in term of sales, revenues and employment, whilst the productivity and profitability indices are increasing.

Table 7: AUTOLINEE TOSCANE - Efficiency and profitability

	2004	*2005*	*2006*	*2007*	*2008***
Labour cost per capita*	37	36	38	24	37
Value added per capita*	48	46	53	35	59
ROS (%)	*1.64*	*0.31*	*3.59*	*7.49*	*14.09*
ROA (%)	*1.35*	*0.28*	*3.48*	*10.19*	*10.92*
ROE (%)	*0.17*	*-3.15*	*3.83*	*10.69*	*16.26*
ROI (%)	*2.03*	*0.45*	*5.25*	*19.17*	*19.32*
Revenues*	6,892	8,302	8,604	6,094	3,425
Sales*	6,404	7,907	8,216	5,493	3,112
Employees	69	76	75	78	37

*Thousand euros, **year of entry

Source: Aida database

In ACTM Modena the Herm fifty-fifty controlled by RaTP with other Italian partners has been selected as a private partner only in 2009, so that the performances described in table 8 refer to the previous period. In 2008 ATCM remains a loss making firm, highly dependent o public subsidies.

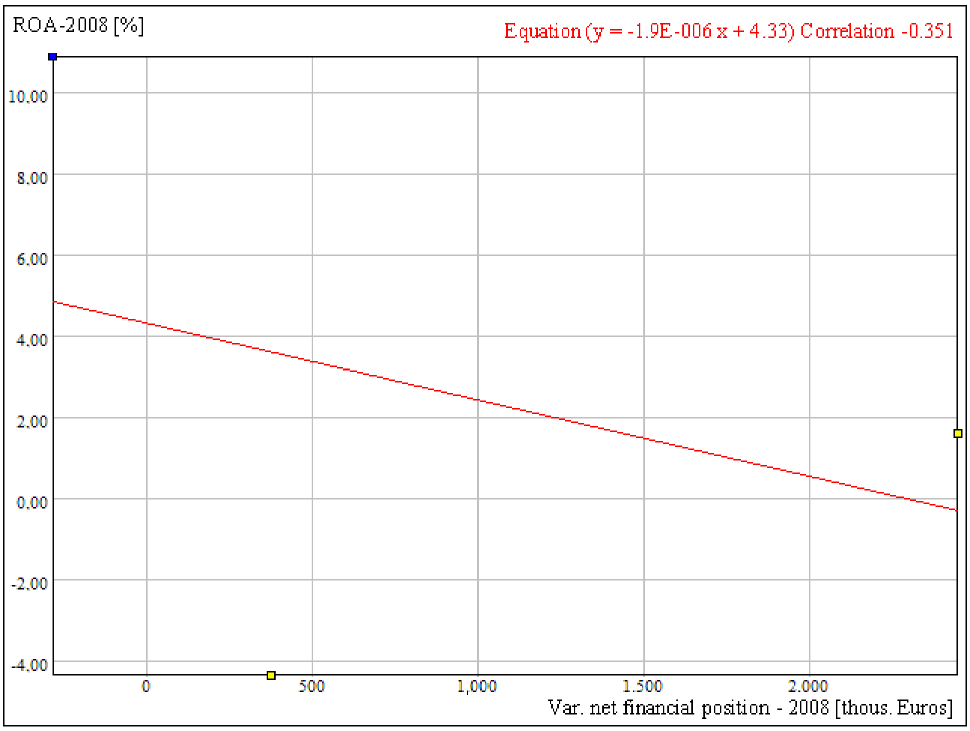
Table 8: ATCM - Efficiency and profitability**

	2004	*2005*	*2006*	*2007*	*2008*
Labour cost per capita*	35	36	37	37	38
Value added per capita*	43	42	42	46	42
ROS (%)	*-10.06*	*-6.89*	*-11.52*	*-7.38*	*-4.79*
ROA (%)	*-5.65*	*-4.02*	*-7.7*	*-5.73*	*-4.37*
ROE (%)	*0.03*	*-4.1*	*-30.93*	*-15.37*	*-13.2*
ROI (%)	*-20.99*	*-15.7*	*-*	*-20.97*	*-26.32*
Revenues*	44,291	46,448	48,336	52,167	47,704
Sales*	11,739	12,307	12,366	13,113	13,781
Employees	580	616	632	651	615

*Thousand Euros, **In consortium (Herm) with other Italian partners RATP has been selected as private partner for ATCM Modena, obtaining a 49% of the shares
Source: Aida database

The simple regression exercise that follows suggests that RATP entries in rail and bus LTP operators are easier in highly indebted firms, as suggested by the literature[24].

Ind. Var. net financial position - 2008 [thous. Euros]
ROA-2008 [%]
Equation (y = -1.9E-006 x + 4.33) Correlation -0.351



[24] See for instance Bertero and Rondi (2000) and the cited bibliography.

5.3 Arriva subsidiaries

Arriva is now the most important private group operating Local public bus transport in Italy, thanks to ten acquisitions of private firms, mostly concentrated in a quite large geographical basin in the Northern Italy, sometimes too small to be included in the AIDA data base.

The largest and oldest is SAB, now the holding company of the whole Arriva Group in Italy.

Table 9: SAB - Efficiency and profitability

	*2002***	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
Labour cost per capita*	33	-	-	44	46	45	48
Value added per capita*	42	41	56	56	59	59	63
ROS (%)	*3.12*	*4.67*	*4.42*	*3.76*	*4.28*	*5.15*	*11.75*
ROA (%)	*2.06*	*3.45*	*3.75*	*3.34*	*3.68*	*3.91*	*7.3*
ROE (%)	*19.57*	*27.35*	*11.25*	*-0.46*	*4.29*	*14.73*	*20.04*
ROI (%)	-	*6.01*	*7.0*	*6.83*	*7.78*	*8.41*	*12.19*
Revenues*	34,167	33,832	35,216	36,799	37,040	37,331	40,439
Sales*	13,164	12,682	13,150	31,163	30,294	30,599	31,057
Employees	505	507	402	409	409	412	401

*Thousand euros, **year of entry

Source: Aida database

The entry effects are quite evident in the preceding table 10. Reorganization took place through a constant reduction of employment accompanied by a continuing increase of labour productivity in SAB and in all the group's subsidiaries. A unified group strategy in different areas of management has led to significant improvement in each full controlled firm's performances. As we can see in tables 10, 11 and 12 almost the same results have been achieved in different profitability indices for SAB, SAIA, and SIA, the three firms controlled by SAB before the Arriva entry.

Table 10: SIA - Efficiency and profitability

	*2002***	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
Labour cost per capita*	33	-	-	44	46	45	48
Value added per capita*	43	-	-	53	55	56	68
ROS (%)	*3.12*	*4.67*	*4.42*	*3.76*	*4.28*	*5.15*	*11.75*
ROA (%)	*2.06*	*3.45*	*3.75*	*3.34*	*3.68*	*3.91*	*7.3*
ROE (%)	*19.57*	*27.35*	*11.25*	*-0.46*	*4.29*	*14.73*	*20.04*
ROI (%)	-	*6.01*	*7.0*	*6.83*	*7.78*	*8.41*	*12.19*
Revenues*	26,991	27,789	28,897	30,815	32,233	32,805	37,560
Sales*	10,803	11,306	12,407	27,543	27,970	28,491	30,067
Employees	444	-	-	376	370	377	359

*Thousand euros, **year of entry

Source: Aida database

Table 11: SAIA - Efficiency and profitability

	*2002***	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
Labour cost per capita*	39	39	41	42	43	45	46
Value added per capita*	62	64	63	65	66	71	81
ROS (%)	*15.6*	*16.12*	*13.29*	*12.1*	*10.51*	*11.93*	*16.24*
ROA (%)	*15.96*	*15.59*	*11.95*	*11.93*	*9.79*	*8.61*	*11.85*
ROE (%)	*24.89*	*22.1*	*22.35*	*6.36*	*10.11*	*30.72*	*23.1*
ROI (%)	-	-	*19.23*	*21.83*	*18.56*	*15.59*	*21.55*
Revenues*	13,589	14,093	14,633	17,065	17,629	18,187	20,762
Sales*	6,595	6,857	7,089	15,464	15,958	16,212	16,930
Employees	151	149	157	159	160	158	158

*Thousand euros, **year of entry

Source: Aida database

The same results could not be achieved in public-private firms, even though the length of time after the entry is almost the same, but the ownership is fifty-fifty shared as in KM (table 12) or even less than 50% as In the case of Trieste Trasporti (39%) (table 13).

Table 12: KM - Efficiency and profitability

	*2002***	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
Labour cost per capita*	39	40	-	-	43	44	45
Value added per capita*	46	42	-	-	49	53	57
ROS (%)	*-2.35*	*-13.52*	*-5.47*	*-3.73*	*-2.45*	*-2.18*	*0.79*
ROA (%)	*-2.76*	*-18.63*	*-5.79*	*-5.43*	*-2.79*	*-2.05*	*0.81*
ROE (%)	*-20*	*-59.62*	*11.78*	*-20.31*	*-18.16*	*-14.74*	*0.21*
ROI (%)	*-*	*-*	*-19.05*	*-18.13*	*-14.64*	*-12.57*	*4.94*
Revenues*	9,118	9,142	9,374	9,634	10,056	10,452	11,334
Sales*	3,462	3,424	5,970	8,753	-	-	9,840
Employees	126	129	-	-	123	121	121

*Thousand euros, **year of entry

Source: Aida database

Table 13: TRIESTE TRASPORTI - Efficiency and profitability

	*2002***	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
Labour cost per capita*	38	-	39	40	41	43	44
Value added per capita*	48	-	53	54	55	59	59
ROS (%)	*3.27*	*3.7*	*4.7*	*4.7*	*3.65*	*6.41*	*5.95*
ROA (%)	*2.22*	*3.19*	*3.76*	*4.31*	*3.89*	*6.04*	*5.55*
ROE (%)	*5.14*	*4.72*	*2.99*	*4.49*	*4.67*	*9.1*	*12.34*
ROI (%)	*-*	*-*	*11.66*	*12.47*	*10.14*	*13.36*	*13.41*
Revenues*	54,789	55,966	58,773	61,432	62,273	66,289	67,682
Sales*	17,136	17,432	17,306	17,294	17,827	18,496	18,539
Employees	843	-	838	838	831	826	835

*Thousand euros, **year of entry

Source: Aida database

SAF, operating in the same constitutionally autonomous Region, i.e. Friuli Venetia Giulia, as Trieste Trasporti, shows very different sales/ revenues ratio[25], because her sales also includes the amount of compensation supplied by the delegation contract, nevertheless the Administrative framework is the same.

[25] According to the Italian D.Lgsl n.422/1999the sales/revenue ration should be at least 35%.

Table 14: SAF - Efficiency and profitability

	2002	*2003*	*2004***	*2005*	*2006*	*2007*	*2008*
Labour cost per capita*	38	38	40	40	41	41	44
Value added per capita*	63	62	63	64	65	69	65
ROS (%)	*13.42*	*13.06*	*11.83*	*11.86*	*6.69*	*14.84*	*9.65*
ROA (%)	*7.11*	*8.89*	*7.83*	*8.1*	*5.06*	*11.64*	*7.75*
ROE (%)	*15.04*	*16.84*	*16.53*	*7.74*	*9.85*	*17.67*	*8.66*
ROI (%)			*12.62*	*13.99*	*8.13*	*17.8*	*11.54*
Revenues*	47,803	50,008	50,721	54,304	55,157	58,656	57,734
Sales*	44,596	45,727	46,236	48,030	49,565	51,247	52,682
Employees	585	610	610	616	620	629	625

*Thousand euros, **year of entry

Source: Aida database

Before the Arriva acquisition SADEM, was owned by a financial company charged to sell the firm, that was made appealing to potential buyers through special operations highly increasing the 2005 profits, as we can see in table 15 looking at ROE.

Table 15: SADEM - Efficiency and profitability

	2002	*2003*	*2004*	*2005***	*2006*	*2007*	*2008*
Labour cost per capita *	35	40	36	37	38	35	39
Value added per capita*	44	41	41	41	47	44	51
ROS (%)	*-2.17*	*-2.67*	*-2.29*	*-1.45*	*3.34*	*3.49*	*5.71*
ROA (%)	*-1.38*	*-1.98*	*-1.81*	*-0.98*	*2.91*	*2.87*	*3.69*
ROE (%)	*26*	*0.33*	*0.38*	*41.34*	*3.75*	*0.69*	*2.55*
ROI (%)	*-*	*-*	*-3.84*	*-1.7*	*4.85*	*5.02*	*5.19*
Revenues*	11,300	13,248	13,810	13,456	14,952	14,614	15,565
Sales*	5,940	7,530	7,168	6,898	8,383	7,864	8,375
Employees	130	129	146	145	146	147	137

*Thousand euros, **year of entry

Source: Aida database

The recent acquisition of ASF from the local public authorities of Como and Lecco gave birth to a fifty-fifty owned company that after the Arriva's entry shows some improvement both in efficiency and profitability indices (tab.16).

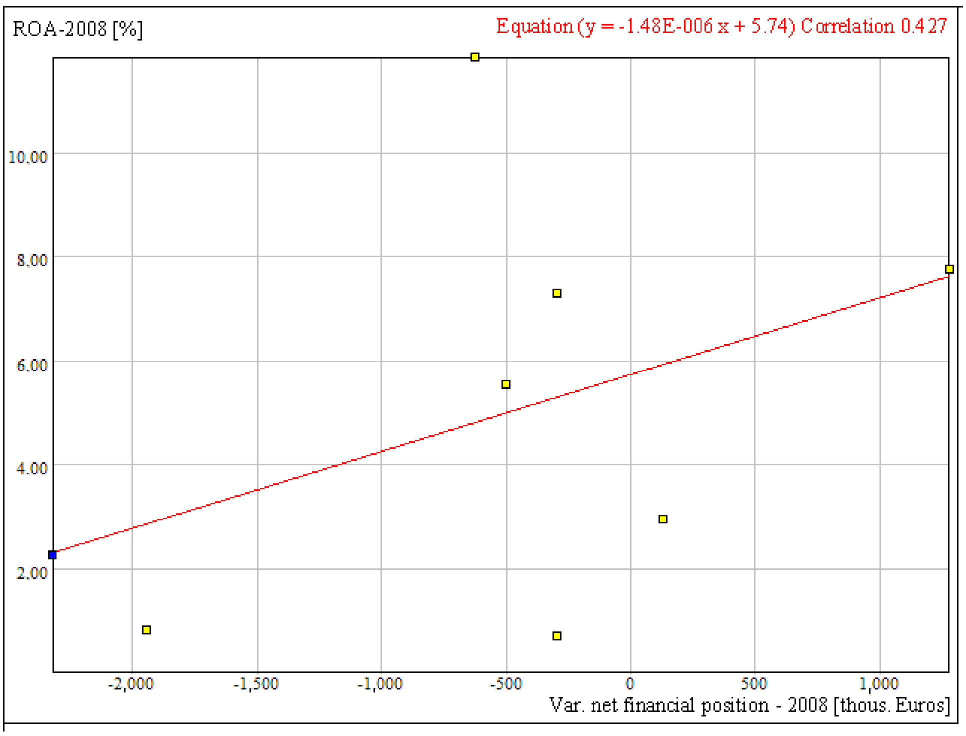
Table 16: ASF - Efficiency and profitability

	2004	*2005*	*2006*	*2007***	*2008*
Labour cost per capita *	40	40	-	43	44
Value added per capita*	44	44	-	48	53
ROS (%)	*-1.95*	*-1.68*	*-0.26*	*-1.63*	*2.1*
ROA (%)	*-2.7*	*-2.08*	*-0.26*	*-1.56*	*2.27*
ROE (%)	*-19.28*	*-29.37*	*-25.67*	*-13.96*	*1.03*
ROI (%)	*-15.28*	*-13.99*	*-1.03*	*-4.64*	*6.66*
Revenues*	35,965	38,183	38,880	39,151	42,007
Sales*	13,320	24,804	33,465	33,479	33,653
Employees	538	547	-	535	529

*Thousand euros, **year of entry
Source: Aida database

The following regression exercise on the relationship between a profitability index as return on assets and the net financial situation of the Arriva's subsidiaries shows a positive correlation, opposite to the negative correlation above seen in the case of RATP. We can hypothesize that a privately owned company, aiming at obtaining the full control of its subsidiaries, chooses to acquire firms in a good financial position and is able to improve their profitability in a short period of time.

Var. net financial position - 2008 [thous. Euros]
ROA-2008 [%]
Equation (y = -1.48-006 x + 5.74) Correlation 0.427



Conclusions

According to Federtrasporto- Nomisma the Italian LTP operators are now reacting to the entry of foreign firms by accelerating the concentration among public companies in the North, notwithstanding the uncertainties of the legislative framework. The local public administrators are also rying to react to the foreign entries, by opening to partial privatizations their utilities through selection of private minority partners by tenders. In any case, also Nomisma admits that in 3 out of 8 mergers and acquisitions in LPT in the years 2007-2009 the buyers were the French companies Transdev and RATP. It is also worth noticing that also in long distance bus travel, from the Northern to Southern Italy, a process of concentration is taking place.

Each foreign investor has followed a different strategy, in choosing the geographical areas and different types of companies. The French players have expanded particularly in Central Italy, with a preference to agreements and acquisitions with municipality's companies.

RATP, at first, through an agreement with Ataf has entered the Tuscany's market through acquisitions of minority shares of private companies. Later RATP was selected in a tender for project financing the line of light rail surface in Florence and then in Modena, to exploit leveraging her capabilities in rail transport. Transdev controls a large part of the Liguria's transport network, after having been selected as a private partner of the previously locally public owned AMT and operates in Veneto with the acquisition of a mixed company.

A privately owned company, as Arriva, aimed at obtaining the full control of its subsidiaries, chooses to acquire firms in a good financial position and is able to improve profitability in a short period of time.

After these transactions the target firms experienced evident recoveries of profitability of different amounts, depending of the control share. The full control leads to better results than the minority one, because the latter implies difficulties in management. It should be emphasized that the recovery and the efficiency-related cost reduction-usually is supposed to result from reduced total cost of staff, whilst our analysis shows that per-capita labour cost is increased in almost all firms.

Target companies are more easily acquired if their net financial position is negative, even though this bad financial position often negatively affects future performances.

The entry of foreign operators seems to favor a new business culture within the LPT sector, potentially interesting foreign firms that have substantial financial resources. The entry is easier in the North-Central regions, where the resistance to "social" fares' increases less and the administrative framework is slowly moving towards a more competitive context.

References

AGCM, 2008, *AS453 - Considerazioni e proposte per una regolazione pro-concorrenziale dei mercati a sostegno della crescita economica*, Roma 11 giugno.

Andrade G., Mitchell M., Stanford E., 2001, *New Evidence and Perspectives on Mergers*, The Journal of Economic Perspectives, Vol. 15, No. 2. (Spring, 2001), pp. 103-120.

Becher D.A., Mulherin J.H., Walking R., 2008, *Industry shocks and merger activity. An analysis of US public utilities,* W.P., January.

Bertero E., Rondi L., 2000, Financial pressure and the behaviour of public enterprises under soft and hard budget constraints: evidence from Italian panel data, *Journal of Public Economics.*

Billon A. Y., 2006, The Attribution Process Of Delegation Contracts In The French Urban Public Transport Sector: Why Competitive Tendering Is A Myth, *Annals of Public and Cooperative Economics,* vol. 77(4), pages 453-478, December.

Bentivogli C., Cullino R., Del Colle D., 2008, *Regolamentazione ed efficienza del trasporto pubblico locale: i divari regionali*, Questioni di Economia e Finanza n. 20, settembre Banca d'Italia.

Bianchi M., Bianco M., 2006, Italian corporate governance in the last 15 years: from pyramids to coalitions, *ECGI Working Paper N°. 144/2006* November.

Bianco M., Mele D., Sestito P., 2008, Le grandi imprese italiane dei servizi pubblici locali: vincoli, opportunità e strategie di crescita, *Occasional paper n. 26 settembre*, Banca d'Italia.

Bogetoft P., Wang D., 2005, Estimating the Potential Gains from Mergers in *Journal of Productivity Analysis,* vol. 23, n. 2, pp.145-171.

Cambini C., Filippini M., Piacenza M., Vannoni D., 2008, The Influence of Corporatization Process on the Cost of Publicly Provided Local Utilities: Some Insights from Bus Transit Systems, *Hermes Ricerche, working paper n. 4.*

Castellani D., 2006, L'impatto della presenza delle multinazionali sul contesto locale, in Mariotti S. e Piscitello L. (a cura di), *Multinazionali, innovazione e strategie per la competitività*, Il Mulino, Bologna.

Castellani D., Zanfei A., 2006, *Multinational firms innovation and productivity for the creation of externalities*, Edward Elgar.

Coeurdacier N., De Santis A., Aviat A., 2009, Cross-border mergers and acquisitions financial and institutional forces, *European Central Bank ECB WP* 1018 march.

Confservizi – Nomisma, 2006, *La competitività delle imprese pubbliche locali*. Rapporto 2006.

Cowie J., 2002, Acquisition, efficiency and scale economies: an analysis of the British bus industry, *Transport Reviews*, vol. 22, n. 2, pp. 147 -157.

Dunning J. H., 1993, *Multinational enterprises and the global economy,* Addison-Wesley, Wokingham, UK.

Elefanti M., 2005, a cura di, *L'evoluzione delle imprese pubbliche locali: il caso Enia*, Il Mulino, Bologna.

Farrell J., Shaphiro C., 2001, Scale Economies and Synergies in Horizontal Merger Analysis, *Antitrust Law Journal*, vol. 68, pp. 685-710.

Federtrasporto- Nomisma 2009 *Scenari dei trasporti. L'internazionalizzazione del trasporto, la posizione italiana*, n. 11, june.

Fornengo G., Ottoz E., 2007, Hybrid organizations in the provision of local public services, *Journal of Public Procurement*, vol. 7, n. 1, pp. 34-61.

Fornengo G., Ottoz E., 2007, Le organizzazioni ibride nel trasporto pubblico locale, in: Marrelli M., Padovano F. e Rizzo I. (a cura di), *Servizi pubblici: nuove tendenze nella regolamentazione, nella produzione e nel finanziamento,* (pp. 277-302), Franco Angeli, Milano.

Gugler H., Mueller D., Yourtoglu B., Zulehener C., 2003, The effects of mergers. An international comparison, *International Journal of industrial organization*, vol. 21, n. 5, pp. 625-253.

Masulis R.W., Pham P.K., Zein J., 2009, Pyramids: Empirical Evidence on the Costs and Benefits of Family Business Groups around the World Finance, *Working Paper N°. 240/2009* March.

Mattias W., Cullmann A., 2008, Potential gains from mergers in local public transport an Efficiency analysis Applied to Germany, *Discussion Papers of DIW N. 832*, Berlin.

Ministero dei Trasporti, 2007, *Conto Nazionale dei Trasporti*, Roma.

Nicolini M., Piscitello L., 2009, Esternalità e spillovers verticali indotti dall'ingresso di imprese estere nel settore dei servizi in Italia, *Rivista italiana degli economisti*, n. 2.

OECD, 1995, Deregulation and Privatisation in the Services Sector, Economic Studies n.25

Ottoz E., Fornengo G., Di Giacomo M., 2008, The influence of ownership on the cost of bus service provision: an example from Italy, *Applied Economics*, pp. 1-13.

Pina V., Torres L., 2001, Analysis of the efficiency of public government service delivery. An application to urban public transport, *Transportation research*, vol. 35, n. 10, pp. 929-944.

Pique 2009, *Privatisation of Public Services and the Impact on Quality, Employment and Productivity (PIQUE) - Summary Report*, Vienna.

Rossi S., Volpin P., 2003, Cross country determinants of mergers and acquisitions, *Paper N°. 25/2003 ECGI September*.

UITP 2006, *Organisation and major players of short distance public transport, new developments in the European Union*, February.

Williamson O.E., 1968, Economies as an Antitrust Defence: the Welfare Trade-Offs, *American Economic Review,* vol. 58, n.1, pp. 18-35.