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Abstract

Greece implemented an extensive privatization program in the past decade, which included the concession of 14 regional airports for a period of 40 years. The main purpose of this paper is to assess the effects of the concession in terms of passenger traffic. For that purpose, we applied a "difference-in-differences" econometric analysis of passenger traffic before and after the concession, using traffic data from the reports of the Hellenic Civil Aviation Authority. As a control group, we used 24 regional airports that remained under state control. The econometric estimation provided indications that the change in the management model of these airports has contributed significantly to the increase of passenger traffic. In particular, the coefficient of the variable used to interpret the effect of privatisation on passenger traffic indicated that, controlling for heterogeneous trends and effects, passenger volume in the privatised airports was higher by 30% than it would have been under state control. The results indicate that strengthening the private sector involvement in the development and operation of public infrastructure may have positive economic impact, particularly when it involves the entry of an experienced international strategic investor in asset development in a country undergoing a prolonged and deep economic crisis.

JEL Classification: H54, L33, L93, O18, R41, C23

Keywords: Airports, Privatisation, passenger traffic, Difference-in-Differences

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The impact of the concession of 14 regional Greek airports on passenger traffic [a]

August 7, 2021

Svetoslav Danchev[b], Nikos Paratsiokas[c], Nikolaos Vettas[d]

Abstract

Greece implemented an extensive privatization program in the past decade, which included the concession of 14 regional airports for a period of 40 years. The main purpose of this paper is to assess the effects of the concession in terms of passenger traffic. For that purpose, we applied a "difference-in-differences" econometric analysis of passenger traffic before and after the concession, using traffic data from the reports of the Hellenic Civil Aviation Authority. As a control group, we used 24 regional airports that remained under state control. The econometric estimation provided indications that the change in the management model of these airports has contributed significantly to the increase of passenger traffic. In particular, the coefficient of the variable used to interpret the effect of privatisation on passenger traffic indicated that, controlling for heterogenous trends and effects, passenger volume in the privatised airports was higher by 30% than it would have been under state control. The results indicate that strengthening the private sector involvement in the development and operation of public infrastructure may have positive economic impact, particularly when it involves the entry of an experienced international strategic investor in asset development in a country undergoing a prolonged and deep economic crisis.

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Airports, privatisation, passenger traffic, difference-in-differences

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1. Introduction

Private sector involvement in the development and management of aviation infrastructure has increased over the past decades through privatisation schemes and long-term concession contracts. In Europe, approximately 75 percent of passenger trips take place through fully or partly privatised airports (ACI, 2016). The transfer of activity from the public to the private sector is considered to facilitate investment and support traffic growth. This is particularly significant for the economic and regional development of countries like Greece that rely strongly on international arrivals of tourists by air.

In the context of the economic adjustment programmes, an extensive privatisation plan of state assets was implemented in Greece.[e] The plan included the concession of 14 regional airports for a period of 40 years. Three of the 14 regional airports included in the concession agreement are on the mainland, among which the one in Thessaloniki, the second largest airport in the country. The remaining 11 privatised airports are located on Greek islands.

The procedure for the privatisation of the regional airports was initiated in 2013 with a call for interest issued by the Hellenic Republic Asset Development Fund. The concession was awarded on 25 November 2014 to Fraport Greece, a consortium of companies consisting of the Frankfurt airport operator Fraport AG and Slentel Limited, a Greek-Cypriot company. The use, operation and development of the 14 regional airports were granted to Fraport Greece for 40 years, starting from April 2017. The concession agreement included an upfront payment of €1.23 billion and an annual fee of €22.9 million during the concession period. Following the concession of the 14 airports to Fraport Greece, 24 regional airports have remained under the control of the Hellenic Civil Aviation Authority.

The concession agreement triggered an investment program for terminal and runway reconstruction, aiming to increase the capacity of the airports and improve their service level over the medium term. The construction works began shortly after the commencement of the concession and were completed in January 2021, three months ahead of schedule. The airports continued to service passenger traffic throughout the reconstruction period. Apart from the investment programme, the airport operator provided incentives to airline operators, aiming at attracting international services and thus increasing traffic even during the investment implementation period.

This paper examines whether the concession of the regional airports with the implementation of the company's business plan produced an impact on passenger traffic. For that purpose, we employ an econometric analysis of passenger traffic before and after the concession to infer the operational effects of the change in the management model of these airports.

The paper is organised as follows: Section 2 provides a discussion of the literature related to the objectives and outcomes of airport privatisation. Section 3 describes the model and the methodology used in this paper. Section 4 presents the results from the main model, while section 5 presents results from robustness checks. The paper concludes with a discussion of the results.

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[e] With the dual goal of raising public revenue and improving the functioning of key markets. See e.g. Skreta (2017).

2. A review of the literature and empirical research

Private sector involvement in airport ownership and management is widespread. According to 2017 data, over 600 commercial airports worldwide have been either partly or fully privatised. The scale of privatisation is stronger in Europe, where almost one third of the airports have some form of private sector participation (Chaouk et al. 2019). The involvement of the private sector in airport infrastructure ownership varies depending on governments' objectives and specific requirements of each airport.

The main factor that differentiates the types of private sector involvement is ownership of the airport assets. In outright sales of existing airports and in Build-Operate-Own agreements, the private firm owns the infrastructure, while in concession agreements management is transferred to the private sector for a specified period of time, yet the government retains ownership (Cruz and Marques, 2011). The private involvement is also evident in areas related to non-aviation activities in airports (such as operation of retail outlets, restaurants and hotels) in order to generate additional revenues to cover infrastructure costs, to attract additional airlines and increase passenger traffic (Zhang and Zhang 2010).

Efficient use of infrastructures, improvement of service quality and long-term sustainability are among the main drivers of private sector involvement (Goetz and Graham, 2004). For governments, airport privatisation is also seen as a means to raise capital through the sale of state assets, to collect recurring revenue from privatised assets (through concession fees or profit taxes) and to reduce the burden of the operation and maintenance of the airports on public expenditure. Airport concessions or leases are particularly popular in developing countries where major airport expansions and modernisation cannot be supported by government resources (Graham, 2011; Graham 2020).

The effect of ownership forms on airport performance is examined in terms of efficiency and productivity.[f] Oum et al. (2008) find evidence that privately operated airports are more efficient than publicly owned airports. Similarly, Assaf and Gillen (2012) argue that privatised airports are more efficient, in terms of passenger volume, aircraft movements and non-aeronautical revenues. Moreover, private airports are less bureaucratic compared to state owned, thus they face fewer restrictions in improving operational performance (Zhang and Czerny, 2012).

The airport transport literature examines the effect of privatisation in terms of traffic growth. Piermartini and Rousova (2008) find a positive correlation between airports with private management control and international passenger traffic. According to their findings, passenger traffic in countries with privatized airports was higher compared to those with state-owned airports. Rolim et al. (2016) examine the effect of airport privatisation in Brazil and argue that passenger demand for the domestic routes increased by 30% following the privatisation. Aguirre et al. (2019) examine the private sector participation in long-term agreements in eighteen airports of Peru. They find that regions that granted airport concessions exhibit higher airport activity – in terms of passenger traffic and aircraft

[f] The operation of each airport may be quite complex and involves a number of aspects, see, e.g., de Neufville *et al.* (2013) – each of these may be crucially affected when changing their ownership from public to private.

movements – while also recording a positive and statistically significant effect on employment.

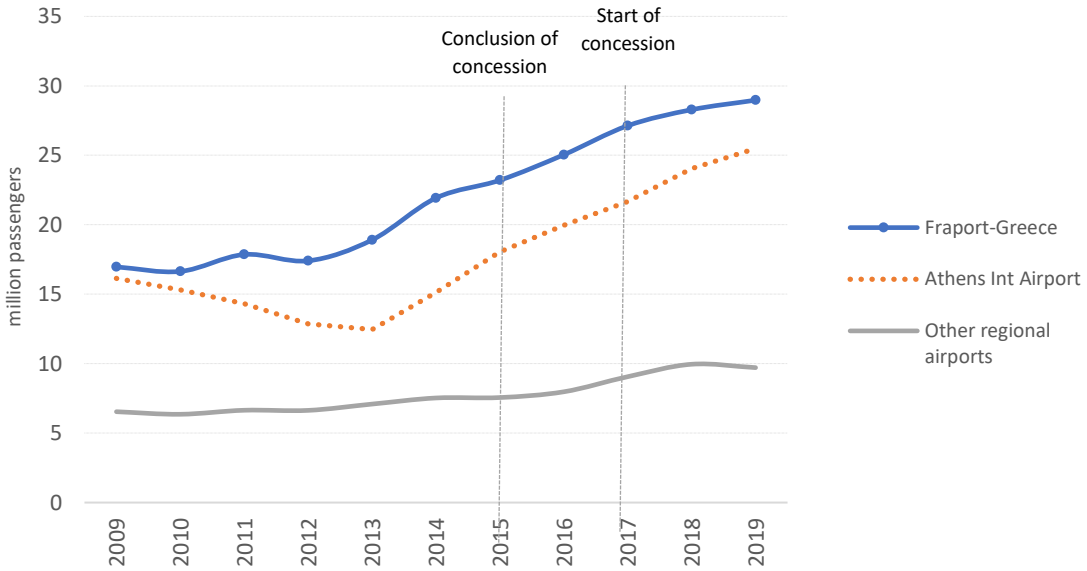
Other studies underline the existence of positive externalities. For instance, Adler et al. (2013) and Jamshidi et al. (2015) indicate that the efficient management of regional airports produces positive environmental effects due to the reduced congestion and the better use of existing infrastructures.

This main contribution of this study is to further our understanding on the impact of private sector involvement on airport performance in terms of passenger traffic in the setup of a developed European economy. It also provides indications on the likelihood and the size of the economic benefits from delegating the development of assets to strategic private investors in countries undergoing deep fiscal distress. Finally, the paper provides further evidence for the need to test the parallel-trends assumption underlying difference-in-differences econometric estimations.

3. Data and methodology

Figure 1 depicts air passenger transport volumes (arrivals and departures) at the Greek airports. The 14 regional airports operated by Fraport represent approximately 40**%** of the air passenger volume in the country. In 2017, the first year of operation, passenger traffic in these airports grew by 9.5% and by 4.2% in 2018, while the positive trend continued in 2019 (+1.5%).[g] In the state-managed regional airports, the number of passengers reached 10 million in 2018, but then it declined to 9.7 million in 2019, with the average growth rate standing at 7% between 2016 and 2019.

Figure 1: Passenger traffic (arrivals and departures) in Greek airports, 2009-2019



Source: Hellenic Civil Aviation Authority

[g] The operating company of the privatized airports reports slightly higher traffic numbers than the Hellenic Civil Aviation Authority (HCAA), as apart from passenger only and normal service flights, it also includes cargo, mail, shuttle mode, special handling charters, cargo in cabin and other flight types. We opted to use the figures from the HCAA for reasons of better comparability with the traffic numbers for the airports that remain under state control.

3.1 Data

In this study, we use traffic data on all Greek airports, except for the Athens International Airport (AIA). AIA S.A. was established in 1996 as a public-private partnership with 30-year concession, granting the company the right to design, finance, construct, and operate a new airport for the country's capital - given the scope of the paper to examine the impact of privatisation of regional airports, AIA was not included in the analysis below. We consider a panel data of quarterly observations from January 2009 to June 2019 (1596 observations). Data regarding the passenger traffic were collected from the reports of the Hellenic Civil Aviation Authority.

3.2 The model specification

The primary outcome of interest in this paper is the impact of the privatisation on passenger traffic, measured by total number of arrivals (domestic and international). Considering the positive trend recoded since the second quarter of 2017 in the 14 Greek regional airports due to the broader growth of tourism, we evaluate the extent to which the operation by Fraport Greece has contributed to this development.

The estimation framework is based on the method of "difference-in-differences" where the privately-operated airports comprise the treated group, while the regional airports that were not privatised is the control group. Pioneered by Ashenfelter and Card (1985), this method has gained widespread use. Its key advantage is that it controls for biases in simpler comparisons of differences across time or across groups that might come from a common trend or from time-unvarying differences between the treatment and control groups.

The model can be expressed as follows:

$$Y_{it} = a_0 + a_1 period_t + a_2 treatment_i + a_3 DiD_{it} + a_4 X_{it} + \varepsilon_{it}$$

where the dependent variable Y_{it} is the natural logarithm of total arrivals in airport i at time t; $period_t$ is a binary indicator taking the value 1 after the start of the concession (for all airports); $treatment_i$ is a binary indicator taking the value 1 for the privatised airports (for all periods); DiD_{it} is a binary indicator variable that takes the value 1 for the 14 regional airports operated by Fraport after the start of the concession; X_{it} are additional controls that may impact the examined relationship, and ε_{it} is a random error term. DiD_{it} is the main variable of interest, as it captures the effect of the concession on arrivals, controlling for differences in the level of traffic between the control and the treatment group, for differences in the level of traffic before and after the concession across all airports and the additional controls included in X_{it}.[h]

The model is estimated using the random effects assumption, in which the constant term is common to all airports and any differences are considered to vary randomly across the airports, incorporated in the residuals of the regression. The model is also estimated using the fixed effects approach, in which the constant term changes per airport, controlling for unobserved time-invariant heterogeneity within each group. We also examine specifications

[h] Apart from the binary indicators described here, we also tried as a control variable the GDP per capita (GDP_t) in the 15 oldest EU member-states (EU-15), based on the fact that the EU-15 residents represent the largest share of international air travellers to Greece. This did not have a material impact on the estimated effects. The results of this estimation are available upon request from the authors.

that include time effects (binary indicators taking the value 1 in each respective period), controlling for time-varying effects that act upon arrivals uniformly across all airports. In all our estimations, we cluster the standard errors per airport to account for possible autocorrelation of the residuals - ignoring this possibility may lead to biased standard error estimates and erroneous inferences in difference-in-differences setting (Bertrand et al., 2004).

A fundamental assumption for the use of the above difference-in-differences model is that passenger traffic in the treated airports would have evolved in the same manner as in their counterparts in case the concession agreement had not taken place. This assumption may not be very reasonable in our case, given that the selection of the airports to be privatised was not a random process. In particular, in about half of the 24 state-controlled airports, the length of the runway restricts their use to turboprop aircraft and thus domestic flights, limiting their long-term growth potential. By contrast, only the airport of Skiathos among the 14 privatized airports has a relatively short runway. It is thus likely that the choice of airports was based on certain desirability criteria, which may imply that the passenger traffic had a different dynamic across the two groups. We attempt to overcome this limitation by estimating a number of alternative specifications - the results are presented in the section on robustness checks.

3.3 Descriptive Statistics

Table 1 presents the descriptive statistics for quarterly arrivals per airport for the privatized airports (treated) and the state-managed (control group) airports, both before and after the commencement of the concession. Prior to the concession commencement, the average quarterly arrivals of the control group are lower than that of the 14 regional airports, which also operated under state management during that period. Additionally, the difference between the average level of arrivals of the two groups is statistically significant, meaning that the two groups of airports do not have the same level of passenger traffic on average. Arrivals increased on average in both state-owned and the 14 regional airports under the management of Fraport Greece between the two periods (before and after the commencement of the concession).

Table 1: Descriptive statistics, quarterly arrivals per airport

	Mean	Median	St. dev.	Obs.	Wilcoxon test
Panel A. Before the concession commencement					
State owned airports	35,635	3,173	177,051	792	-21.225***
14 regional airports as state owned	171,399	68,436	240,401	462	
Panel B. After the concession commencement					
State owned airports	51,238	4,440	240,058	216	-11.799***
14 regional airports under the management of Fraport-Greece	255,076	107,751	315,811	126	

Note. The period before the concession commencement includes data from the first quarter of 2009 until the first quarter of 2017.

4. Empirical results and findings

Table 2 shows the estimated parameters of the regression under four specifications: random effects (RE), fixed effects across airports (FE), time effects and two-way fixed effects (across both time and airports - 2WFE). While there are some differences in the estimated coefficients across the four specifications, the coefficient of the DiD variable (the main coefficient of interest) is positive and statistically significant in all cases and with little variation. The estimated impact is sizable - it implies that passenger arrivals in the 14 regional airports were higher by approximately 40% than they would have been under state control.

Regarding the remaining results, the coefficient of the period variable is positive, but not statistically significant, while under the two-way fixed specification its estimation is dropped due to collinearity with the remaining coefficients. Respectively, the treatment variable is not identified in two of the four specifications, as it is collinear with the airport fixed effects. Under the random-effects specification, the coefficient of the treatment variable is positive and statistically significant, indicating that the average level of arrivals is indeed higher for the privatised airports throughout the examined period. The size of the estimated coefficient implies that, controlling for the impact of the concession and various time effects, arrivals in the 14 regional airports that were privatised were on average higher by a factor of 2,7 over the examined period.

Table 2: Estimated coefficients of the difference-in-differences regression

Variables and models	RE	FE	TE	2WFE
period	0.123 (0.102)	0.123 (0.102)	0.119 (0.255)	
treatment	2.706*** (0.455)		2.702*** (0.455)	
DiD	0.402*** (0.125)	0.401*** (0.125)	0.406*** (0.124)	0.394*** (0.124)
Constant term	8.212*** (0.317)		8.216*** (0.826)	
Cross-sectional fixed effects	No	Yes	No	Yes
Time effects	No	No	Yes	Yes
Random effects	Yes	No	Yes	No
Observations	1587	1587	1587	1587

The numbers in brackets indicate standard errors
Statistical significance at 1% (***), 5% (**), 10% (*)

5. Robustness checks

In this section, we check if the above results change by amending further the model specification. To start with, we introduce binary indicators to control for seasonal effects (Table 3). Given that Greece is a popular destination for sea-and-beach tourism, while most regional airports are located on islands, it is reasonable to expect that passenger traffic is stronger during the summer months. Indeed, the coefficients on the seasonal variables for quarters 2 to 4 are positive and statistically significant, with the largest coefficient registered during the third quarter (from July to September). The introduction of the controls for the seasonal effects does not change the size and the statistical significance of the coefficient on the variable of interest that shows the effects of the concession on passenger traffic (DiD).

Next, we relax the assumption of parallel trends of passenger traffic in the treated and control group, underlying the standard difference-in-differences estimation. The presence of diverging trends may lead to an overestimation of the intervention effect (Heckman & Smith,

2001). The assumption of parallel trends can be relaxed by introducing group-specific or even unit-specific trends in the model specification (Besley & Burgess, 2004).

Table 3: Estimated coefficients of the difference-in-differences regression with seasonal effects

Variables and models	RE	FE	TE	2WFE
period	0.034 (0.101)	0.034 (0.101)	0.023 (0.101)	
treatment	2.715*** (0.455)		2.704*** (0.455)	
DiD	0.393*** (0.124)	0.393*** (0.124)	0.404*** (0.123)	0.394*** (0.124)
Q2	1.686*** (0.230)	1.686*** (0.230)	1.687*** (0.227)	1.686*** (0.230)
Q3	2.159*** (0.251)	2.159*** (0.251)	2.149*** (0.250)	2.159*** (0.251)
Q4	0.601*** (0.130)	0.601*** (0.130)	0.591*** (0.129)	0.601*** (0.130)
Constant term	7.125*** (0.342)		7.141*** (0.345)	
Cross-sectional fixed effects	No	Yes	No	Yes
Time effects	No	No	Yes	Yes
Random effects	Yes	No	Yes	No
Observations	1587	1587	1587	1587

The numbers in brackets indicate standard errors
Statistical significance at 1% (***), 5% (**), 10% (*)

We first test the robustness of our estimates by introducing annual group-specific linear trend, which takes the values of 1 to 11 for the respective years covered by the analysis for the privatized airports and 0 for all years for the remaining regional airports.[i] The introduction of the group-specific linear trend reduces the coefficients for the DiD and treatment variables by about 0,1 (Table 4), with the results for the DiD variable remaining statistically significant at the 5% significance level.

The coefficient on the group-specific linear trend indicator is positive but not statistically significant. Next, we examine linear trends that are specific for each airport, by introducing in our specification an interaction term of the fixed effects and an annual linear trend (resulting in 38 indicators taking the values 1 to 11 for each year of the analysis in observations pertaining to a specific airport and 0 otherwise). Under this specification, we obtain statistically significant coefficients for the unit-specific linear trends for most airports in at least one of the four estimated specifications.

The coefficients on the DiD and treatment variable remain practically unchanged when we move from group-specific to unit-specific linear trends (Table 5). This implies that the concession on passenger traffic is estimated to have increased traffic by about 30% (instead of 40% as estimated earlier), once the possibility of different trends is controlled for. This result is in line with the finding of Rolim et al. (2016) for 30% increase in domestic passenger traffic as a result of airport privatisation in Brazil.

[i] We opted for introducing annual, rather than quarterly time trends, to reflect the annual cycle of tourism marketing campaigns in Greece, where pricing responds to differences between actual and planned demand as set in annual budgets.

We also check if the results change when we fit seasonal effects that differ across airports. It is possible that the seasonality is not equally strong across airports, as the share of tourism traffic need not be the same for all airports. Introducing the fixed and seasonal effects interaction does not change the coefficient on the DiD variable (Table 6).

Table 4: Estimated coefficients of the difference-in-differences regression with group-specific linear trends

Variables and models	RE	FE	TE	2WFE
period	0.034 (0.101)	0.034 (0.101)	0.023 (0.101)	
treatment	2.626*** (0.439)		2.616*** (0.439)	
DiD	0.292** (0.127)	0.292** (0.127)	0.304** (0.127)	0.308** (0.122)
Q2	1.690*** (0.230)	1.690*** (0.230)	1.690*** (0.228)	
Q3	2.164*** (0.252)	2.164*** (0.252)	2.154*** (0.251)	
Q4	0.605*** (0.130)	0.605*** (0.130)	0.595*** (0.129)	
Linear trend for treated group	0.019 (0.017)	0.019 (0.017)	0.019 (0.017)	0.016 (0.025)
Constant term	7.122*** (0.342)		7.138*** (0.345)	
Cross-sectional fixed effects	No	Yes	No	Yes
Time effects	No	No	Yes	Yes
Random effects	Yes	No	Yes	No
Observations	1587	1587	1587	1587

The numbers in brackets indicate standard errors
Statistical significance at 1% (***), 5% (**), 10% (*)

Table 5: Estimated coefficients of the difference-in-differences regression with unit-specific linear trends

Variables and models	RE	FE	TE	2WFE
period	0.023 (0.085)	0.023 (0.085)	0.031 (0.085)	
treatment	2.637*** (0.450)		2.619*** (0.448)	
DiD	0.303** (0.125)	0.303** (0.125)	0.294** (0.124)	0.304** (0.124)
Q2	1.690*** (0.233)	1.690*** (0.233)	1.695*** (0.233)	
Q3	2.165*** (0.255)	2.165*** (0.255)	2.161*** (0.256)	
Q4	0.606*** (0.131)	0.607*** (0.131)	0.603*** (0.132)	
Constant term	0.023 (0.085)	0.023 (0.085)	0.031 (0.085)	
Unit-specific linear trends	Yes	Yes	Yes	Yes
Cross-sectional fixed effects	No	Yes	No	Yes
Time effects	No	No	Yes	Yes
Random effects	Yes	No	Yes	No
Observations	1587	1587	1587	1587

The numbers in brackets indicate standard errors
Statistical significance at 1% (***), 5% (**), 10% (*)

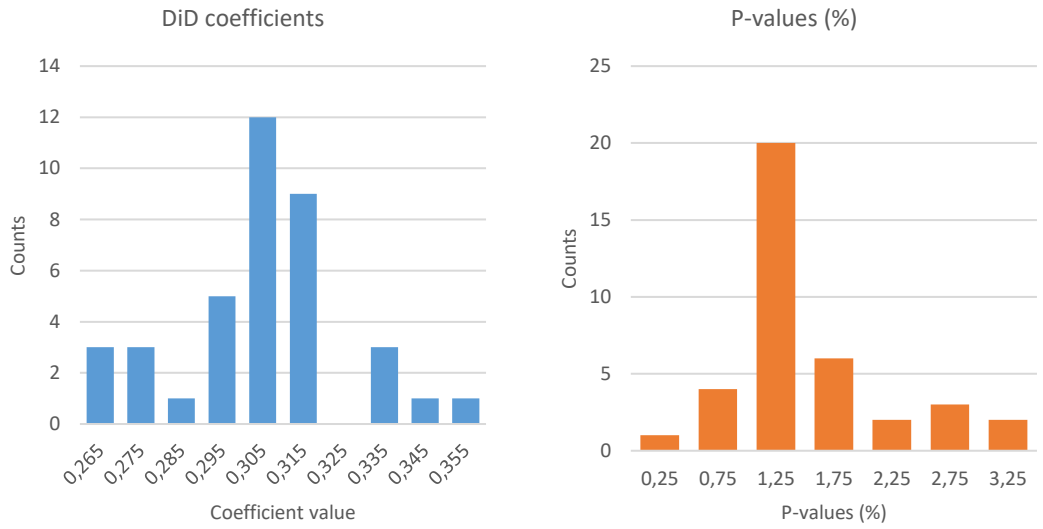
Table 6: Estimated coefficients of the difference-in-differences regression with unit-specific seasonal effects

Variables and models	FE	2WFE
period	0.080 (0.102)	
DiD	0.304** (0.122)	0.305** (0.122)
Unit-specific seasonal effects	Yes	Yes
Cross-sectional fixed effects	Yes	Yes
Time effects	No	Yes
Random effects	No	No
Observations	1587	1587

The numbers in brackets indicate standard errors
Statistical significance at 1% (***), 5% (**), 10% (*)

Another possibility that we examine concerns the likelihood that the outcome is driven by diverging dynamics of outliers. This check is substantiated by the heterogeneity of the airports in the sample. To perform this check, we ran the estimations, eliminating each airport one at a time. Histograms of the DiD coefficient estimates from this elimination procedure, with the corresponding p-values are depicted in Figure 2. The DiD coefficient remains within the range 0.26-0.36, while under all 38 specifications it is statistically significant at the 5% level.

Figure 2: Histograms of DiD coefficient estimate and corresponding p-values for specifications with airport elimination

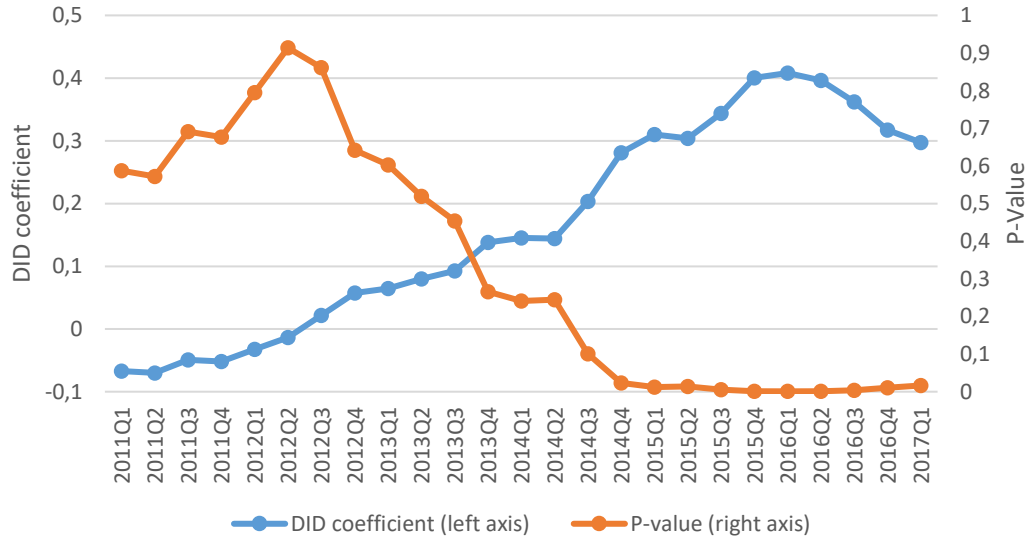


Note: Based on two-way fixed effects with unit-specific seasonal effects, eliminating from the estimation each airport (one at a time).

Next, we look into the results of placebo checks for the timing of the treatment. For this check, we ran estimations by placing the treatment at various points along the timeline, starting from the first quarter of 2011 and looking into the effects of two years of (placebo) treatment. The DiD coefficient is negative for placebo treatments from 2011Q1 to 2012Q2. It then turns positive but remains statistically insignificant until the final quarter of 2014. This result implies that there are hardly any indications for a different traffic dynamic between the treatment and control groups prior to the start of the privatisation procedure in early 2013, while the impact on traffic becomes evident in the data already from the announcement of Fraport Greece as the winner of the tender in the final quarter of 2014. The latter point may also

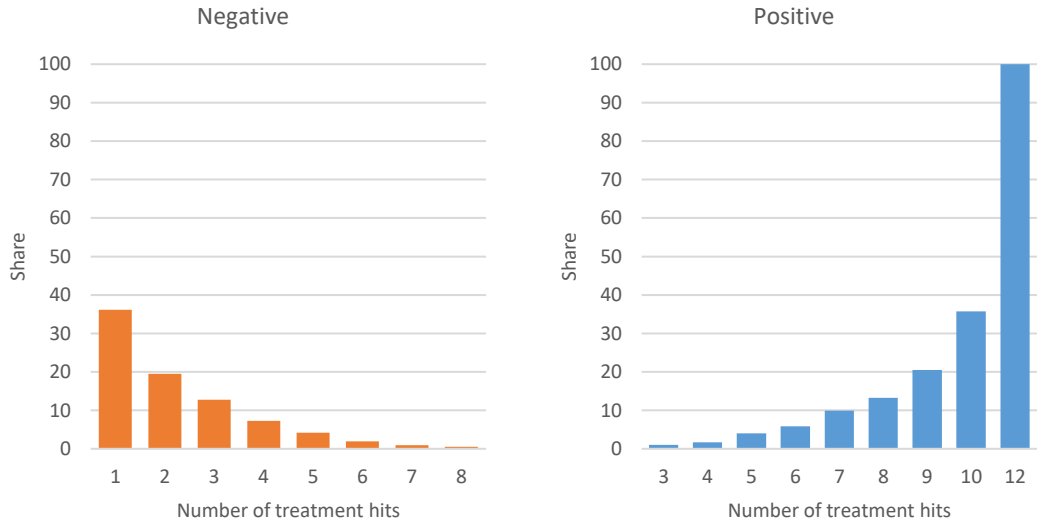
reflect the pro-active approach that the company took in strengthening traffic even before the official start of the concession agreement.

Figure 3: DID coefficient and corresponding p-values per placebo start of treatment



Note: Based on two-way fixed effects with unit-specific seasonal effect.

Figure 4: Share of statistically significant DID coefficient estimates per number of successful treatment hits



Note: Based on two-way fixed effects with unit-specific seasonal effect.

Lastly, we examined a placebo test where the treatment and control groups are assigned at random, keeping the ratio of 14 treated per 24 controlled units. We repeated the estimation for 10,000 runs, with random permutations of the choice of treated airports and then separated the results on the DiD coefficient in clusters according to the number of privatised airports in each placebo treatment group. The results show that as the number of privatised airports in each placebo treatment group increases, the share of negative and statistically significant estimation runs in each cluster falls. Correspondingly, the share of positive and statistically significant estimation runs increases with the number of privatised airports in

each placebo treatment group. There are no negative and statistically significant outcomes in placebo treatment groups with more than 8 privatised airports and correspondingly there are no positive and statistically significant outcomes in placebo treatment groups with less than 3 privatised airports. This result provides an indication that the separation of the airports into treatment and control groups according to whether they were privatised or not is indeed meaningful.

6. Conclusions

The objective of this paper is to assess the impact of the concession of 14 Greek regional airports on passenger traffic. The estimations, based on the difference-in-differences method, indicated that the concession of the airports exerted significant positive effects during the examined period. In particular, the coefficient of the variable used to interpret the effect of privatisation on passenger traffic (the binary treatment indicator) indicated that, controlling for heterogenous trends and effects, passenger traffic in the privatised airports was higher by 30% than it would have otherwise been had they remained under state management.

The positive effect may be due to the adoption of a more proactive operation model in the airports after the announcement of the concession. Apart from the implementation of an extensive investment plan for the modernisation and upgrade of the infrastructure of the airports, the new airport operator, leveraging its global presence and know-how, took actions to promote the addition of new routes, extend the operating season of the airlines and increase passenger traffic even before the start of the concession in April 2017. The experience from the concession of the regional airports in Greece provides indications that strengthening the private sector involvement in the development and operation of public infrastructure may have positive economic impact, particularly when it involves the entry of an experienced international strategic investor in asset development in a country undergoing a prolonged and deep economic crisis.

7. References

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