

Do Tourist Companies Support a Greater Direct Tax Burden? The Case of Spain

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Abstract

Most of the literature on tourism taxation focuses on indirect taxes, on their use as a policy to promote tourism or as a system for collecting and controlling revenue. This document addresses an issue which has thus far remained almost unexplored; the direct taxation of tourism through the corporate tax borne by companies in the sector. The proposed objectives are twofold: first, to verify whether direct taxation leads to an additional tax on the tourism sector, which compensates for the lower collection due to the application of reduced rates in indirect taxation; and second, to ascertain whether there are differences between the different subsectors of the tourism sector in this regard. For this, a random sample of 16,266 Spanish companies for the period 2014-2018 is used, taken from the SABI (Iberian Balance Analysis System) base. Results show that Spanish tourism companies are taxed above average, although less than most subsectors of the services sector, such that it cannot be said that there is compensation for the lower VAT tax burden. However, the exception is travel agencies, who bear a much higher levy on corporate tax whilst at the same time enjoying a special VAT regime.

Keywords: corporate tax, tourism companies, Spain, indirect taxation, tourism subsectors

1. Introduction

In countries which see substantial tourist influx, and where the tourism industry contributes a high percentage to GDP, taxation of the tourism sector has the status of strategic taxation for two reasons: because of the sensitivity of public sector revenue to changes in tourism demand, and due to the strategic use made of it to generate incentive or disincentive effects, depending on governments' desire to incentivize tourism production or to control its possible excess.

Tax charges can be direct or indirect. They are direct when they are defined such that the tax is paid according to the individual characteristics of each taxpayer, and they are indirect when the tax is applied to transactions between subjects (Atkinson, 1977). Based on this distinction, direct taxes are those levied on income (personal income tax, corporate tax,...) or wealth (taxes on wealth), whilst indirect taxes are those levied on consumption, generally (Value Added Tax, VAT) or specifically (taxes on fuel, tobacco, alcoholic beverages, ...), or asset transactions.

The tax policy applied to the tourism sector often revolves around indirect taxation on the basis of arguments such as: its low distorting impact, the exportability of the burden, the application of the principle of profit, and its use as a mechanism to correct negative economic effects (Gago et. al., 2006, 2009). The result is the proliferation of myriad excise duties, up to 40 types, which are applied by different countries depending on government priorities (World Tourism Organization, 1998). Special tax treatment is also often given within general indirect taxation, usually VAT, by applying reduced rates so as to favour the industry (European Commission, 2005; World Travel and Tax Policy Center, 2002). The relevance of these favourable tax treatments makes the literature on them relatively broad, from the early works of Combs

and Elledge, 1979, Mak and Nishimura, 1979 and Fujii, Khaled and Mak, 1985. However, there is an almost total lack of work addressing direct taxation.

In general, countries often give direct tax treatment to the tourism sector that is similar to the one applied to other companies. However, favourable tax deals in indirect taxation may end up being partly absorbed by higher direct taxation. This latter question is relevant for two reasons: first, because part of the reductions in indirect taxation would have no impact on lower prices for tourists but would be having an impact on higher revenue for tourism companies: in other words, favourable tax treatment would not improve the international competitiveness of the sector; and second, because the public sector, which receives the tax revenue, would be recovering a part of the tax revenues lost due to the favourable tax treatment of indirect taxation. Both are fundamental questions when designing tourist tax policy.

Based on this reasoning, two objectives are pursued in this work: first, to determine whether tourism companies are over-taxed in direct taxation and whether government obtains a return that compensates for the favourable indirect taxation through VAT; and second, to ascertain whether the situation is the same in all tourism subsectors or whether there are specific cases, given that there are singular cases of VAT taxation. In both instances, hypothesis H1 is tested: "Tourism companies bear a greater direct tax burden in corporate tax (CT), producing a tax return that compensates favourable treatment in VAT".

To do this, the case of CT in Spain is taken, a global tourism power, and one which affords favourable treatment to the tourism industry in indirect taxation and which does not establish any favourable regulation in direct taxation. According to the

Spanish Tourism Satellite Account¹, tourism production reached EUR 147,946 million in 2018, which accounted for 12.3% of GDP, and generated 2.62 million jobs, 12.7% of the economy's total employment. Likewise, based on data from the World Tourism Organization², Spain ranks amongst the leading countries both in the number of arrivals of non-resident visitors and in said visitors' expenditure. For the average of the 1995-2018 period, Spain accounted for 5.8% of all visitors, ranking fifth behind France, the USA, China and Mexico, and accounted for 5.9% of spending, ranking second, behind the USA, which accounts for 15.8% of the total³. Obviously, together with the economic importance of tourism in Spain, this is also a major source of tax revenue.

In terms of indirect taxation, the general rate of VAT in Spain is 21%. However, in order to improve the international competitiveness of the tourism industry, the main activities associated with tourism are taxed at a reduced rate of 10%: the transport of people and their luggage, hospitality services, restaurant services and, in general, the supply of food and beverages for on-the-spot consumption, as well as entry to museums, art galleries, picture galleries, theatres, circuses, bullfights, concerts, other live cultural shows and amateur sports events. In addition, there is a special VAT regime for travel agencies (Jiménez, 2012 and Iglesias, 2013) which affects the VAT tax base. As regards direct taxation, and in contrast to what happens with other sectors or activities such as mining, hydrocarbon exploitation or shipping, corporate tax does not contemplate any specific regime for the taxation of the tourist sector.

In short, Spain is a prototypical tourist country that fiscally encourages tourism by applying reduced VAT rates to many tourism sector activities. Indeed to one specific

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https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736169169&menu=ultiDatos&idp=1254735576863

² <https://www.unwto.org/>

³ Own data using primary data obtained from the World Tourism Organization, Compendium of Tourism Statistics - Basic data and indicators

tourism subsector, travel agencies, it applies a special regulation. Moreover, it does not apply relevant specific indirect taxes and applies general criteria to tourism companies in direct taxation: in other words, it provides an area of study that offers the right characteristics to achieve the proposed research objectives.

The remainder of the work is structured as follows: section 2 provides a review of the literature on tourism taxation. Section 3 sets out the methodology, variables used and data source employed in the empirical analysis. Section 4 shows the results, and finally section 5 presents the main conclusions obtained.

2. Literature review

Tax revenue from tourism activities may account for over 10% of the revenue collected by some developed countries and can reach up to 100% in certain small tourist economies (McAleer, Shareef, and Da Veiga, 2005). Such arguments favour indirect taxation on the tourism sector: the low distorting effects of taxes; the high exportability of the tax burden; the possibility of applying the principle of profit, and tourists paying for the public services they consume; coupled with its ability to correct negative externalities (Gago et. al., 2006, 2009).

With regard to the first argument, many tourist destinations lack any perfect substitute destinations (due to particular geographical or climatic reasons, distance, quality, etc.) such that there is a certain monopoly power (see Gooroochurn and Sinclair, 2005) which allows the tax wedge to be introduced by moving it to price without it affecting tourist consumption. On the other hand, when the tax burden falls mainly on non-resident tourists (that is, there is high exportability of the tax), the excess burden or inefficiency due to distortion does not affect nationals (Gooroochurn and Sinclair, 2003). This makes tourism taxation a highly appealing instrument for tax

reform (Fujii et al, 1985) or for obtaining additional income to finance new public expenditures.

Intense tourist activity makes it necessary to provide more services; for example, public safety or health care, garbage collection, etc., the cost of which should not be borne by the ordinary taxes paid by the usual residents. In addition, administrations must provide adequate infrastructure for peak demands in high seasons that are underutilized during the rest of the year (Briassoulis 2002). In this context, citizens' concern about increased public spending and the feeling that they are subsidizing the tourism industry (Combs and Elledge, 1979), together with the establishment of tourism taxes that are guided by the principle of profit, are seen as legitimate. This is the type of tax referred to in Principle 10 of the Lanzarote Charter of Sustainable Tourism (approved in the World Conference on Sustainable Tourism in 1995): "measures are urgently needed to enable a more equitable distribution of tourism benefits and burdens".

Other external costs arising from tourism can be very high (Green, Hunter, and Moore, 1990) and can adversely affect tourism itself through congestion and environmental impact (Combs and Elledge, 1979). Mass tourism can decrease the quality of the tourist experience due to street congestion, psychological stress on local users and visitors, deterioration of natural resources and utilities, or loss of aesthetic value (Briassoulis, 2002; Ryan, 2002). If a tax includes environmental and congestion costs in the final price of the tourist package, such as a Pigouvian tax, it will restore economic efficiency. Indirect taxes are therefore a powerful tool to incorporate external costs that are not included in the final price paid by tourists (Clarke and Ng, 1993).

For these reasons, studies on the taxation of tourist activities have focused on indirect taxation; more specifically on a wide variety of excise duties applied to:

arrivals/departures, air travel, airports/seaports/land borders, hotels/accommodation, restaurants, tolls, car rental, coaches, tourist attractions, and training (see Table 1) (World Tourism Organization, 1998).

TABLE 1 HERE

Of these taxes, the most widely studied in the literature has been the hotel accommodation tax (Mak and Nishimura, 1979; Combs and Elledge, 1979; Fujii, Khaled and Mak, 1985, 1988; Mak, 1988; Spengler and Uysal, 1989; Bonham, Fujii, Im and Mak, 1992; Hiemstra and Ismail, 1992, 1993; Bonham and Gangnes, 1996 and Im and Sakai, 1996).

With regard to excise duties, in addition to the usual port and airport charges for travellers, which are borne by passenger tourists as in all other countries, there is only one regional tax; the so-called ecotax or sustainable tourism tax, established by the government of the Balearic Islands in 2016, which taxes stays in hotels, hostels, cruise ships, private homes intended for tourist leasing and so on.

General indirect taxation in the tourism sector has, however, received less attention from the literature (Kristjánsdóttir, 2020, Blake, 2000; Gooroochurn and Milner, 2004; Gooroochurn and Sinclair, 2005; Wanhill, 1995). VAT is the centrepiece of consumption taxation in over 130 countries (Keen, 2007), many of whom engage in pro-tourism tax treatment by applying reduced rates. As an example, VAT rates applied to hotels in the case of the European Union are approximately 50% lower than the general rates in fifteen EU countries, and 40% lower than the general rates in new EU member countries, while VAT rates in restaurants, bars and cafes are around 30% and 20% lower, respectively (European Commission, 2005; World Travel and Tax Policy Center, 2002).

The lack of literature is even more noticeable when it comes to direct taxation. There are only two recent works analysing general aspects of this taxation (Álamo, 2018) and which explore the importance of certain economic characteristics in the direct taxation of hotels or travel agencies (Moreno, González and Martín, 2017), both for the case of Spain. This lack of studies means that fundamental questions remain unanswered, such as: ascertaining whether tourism companies pay more or less CT than other companies or whether the lower indirect taxes (VAT) in the tourism sector are recovered through direct taxation (CT). The absence of answers to these questions opens the door to a new field of research - direct taxation in the tourism sector -, and providing answers to these questions constitutes the objective of this work.

3. Methodology

The method used to prepare the work was as follows. First, the data sources were selected and observations from the sample were extracted. Data were then refined so as to avoid problems with negative figures and, finally, the values were assigned to the representative sector or subsector dummy variables. After having obtained the database with the complete variables, an estimation model was applied using panel data, performing the regressions sequentially and constructing three scenarios: in the first, the representative dummies of the tourism sector and the services sector were included (without tourism) to test whether the tourism sector experiences a greater or lesser tax burden due to corporate tax than the economy as a whole and the rest of the services sector; in the second, disaggregated service sector subsectors were included, in addition to tourism, to compare taxation at the subsector level; and in the third, tourism subsectors were disaggregated in order to determine whether the tax burden difference in the tourism subsector is the same for all its subsectors equally or whether there are

differences between them. Finally, the results obtained were analysed.

As regards the data, as a source the SABI (Iberian Balance Analysis System) database was used, developed by INFORMA in collaboration with Bureau Van Dijk, which allows quick and easy management of the general information and annual accounts of over 2.7 million Spanish companies and over 800,000 Portuguese companies. A sample of 27,500 Spanish companies for the period 2014-2018 was extracted in order to exclude the effects of the economic crisis. As is common in most empirical studies into this issue (Fernández, 2004; Molina, 2005; Wilkie and Limberg, 1993), remarks that have a negative corporate tax debt or negative accounting result since were removed; otherwise, the ETR would be positive (by dividing negative corporate tax between the also negative accounting result). This would not be reasonable because it must in fact be considered a negative effect, since those losses will imply a lower tax payment in the following years. The result is a data dashboard of 16,266 companies, of which 11,033 companies are from the services sector and 1,387 from the tourism subsector, in accordance with the selection criteria explained below.

In order to define tourism economic activities, the recommendations of the Statistical Office of the European Communities and United Nations (2001) and of the National Institute of Statistics of Spain (2002) were followed. Based on these, the list is given in Table 2, where the group codes corresponding to the National Classification of Economic Activities (CNAE-2009) were included.

TABLE 2 HERE

As regards the services sector as a whole, the relevant subsectors and economic activities are as follows:

TABLE 3 HERE

The econometric method applied in this research consists of a panel data model that takes the accounting data of the effective tax rate (ETR) of CT as the dependent variable (Porcano, 1986, Omer, Molloy and Ziebart, 1991, Gupta and Newberry, 1997). This variable sums up the effect of the set of tax variables that influence the determination of the tax burden such as: compensation of negative tax bases, deductions and bonuses, etc. (Fonseca, Fernández and Martínez, 2011). Fundamental explanatory variables of the CT tax burden include company size, economic profitability, and asset composition (measured by capital intensity).

As regards the size of the company, this variable has triggered a major debate, given that there are two distinct hypotheses: the hypothesis of political costs, and that of political power. The first considers that larger companies are taxed more heavily because they are subject to greater scrutiny by the public authorities compared to smaller companies (Alchian and Kessel, 1962 and Jensen and Meckling, 1976). For its part, the second hypothesis proposes that large companies pay less corporate tax because they have greater resources which they can allocate to influence political processes that act in their favour, and can develop tax planning systems that minimize the burden over time, as well as engage in accounting methods that involve tax savings (Siegfried, 1972, Salamon and Siegfried, 1977). As for economic profitability, the above discussion is also projected on this variable. Thus, there are arguments that justify imposing a greater tax burden on the most profitable companies, since public visibility exposes them to greater government regulatory action, added to which their greater success or enjoying monopolistic profits creates expectations that they should assume greater social responsibility (Watts and Zimmerman , 1978 and Zimmerman, 1983). In the opposite direction, there are arguments justifying the lower tax burden, due to the

greater amount of resources available to exercise political influence (Salamon and Siegfried, 1977). Finally, the composition of the asset is usually included in studies because it can condition the ETR borne by companies, since the existence of freezes gives the company the right to deductibility from depreciation expenses, such that capital intensity produces a lower tax burden (Stickney and McGee, 1982 and Gupta and Newberry, 1997).

Together with these control variables, and in order to assess differences in taxation between the tourism sector, its subsectors and the rest of the service sectors as well as the rest of the economy, representative dummy variables for these were included.

The econometric specification for the data panel of these companies and for five years (2014-2018) is as follows:

$$ETR_{i,t} = \alpha \cdot SIZE_{i,t} + \beta \cdot PROFITABILITY_{i,t} + \gamma \cdot CAPITALINTENSITY_{i,t} + \delta_j + \varepsilon_{i,t}$$

with i being the n companies of the panel, t the year, and j the sector or subsector to which the company belongs.

The variables of the model are defined by:

$$-ETR = \frac{\text{Corporate tax expense}}{EBITDA}$$

where EBITDA is Earnings Before Interest, Taxes, Depreciation, and Amortization, since the interest expense from debt and amortization of capital are deducted in corporate tax

$$-SIZE = \text{Log} (TOTAL ASSET)$$

$$-PROFITABILITY = \frac{EBITDA}{TOTAL ASSET}$$

$$-CAPITALINTENSITY = \frac{FIXED ASSET}{TOTAL ASSET}$$

- Finally, the variables δ_j are dummies that identify the subsector to which the company belongs, such that they take the value one if the company belongs to sector or subsector j , and zero otherwise. These variables capture the difference in the payment of taxes as a result of belonging to the relevant sector or subsector in such a way that if they are significant and positive, companies in the sector or subsector bear a higher tax burden than the company average.

As regards the econometric procedure followed, since there is a sample in the form of panel data, this econometric technique for estimation is used. In order to assess whether it is more appropriate to estimate fixed or random effects, the Hausman test (1978) is applied, setting the null hypothesis (H_0) that random and fixed effect estimators do not disagree. For the data in our sample, the Hausman test rejects the null hypothesis. It is therefore more appropriate to use fixed effects. In addition, Wald's heteroscedasticity test is applied. The null hypothesis is homoscedasticity in waste. The result is that the null hypothesis is rejected, such that the robust standard error method to heteroscedasticity is used to perform regressions.

4. Results

The descriptive statistics of the sample and its sections are those shown in Table 4. With regard to these, for the dependent variable, ETR, particular mention should be made of the notably higher tax on CT that occurs in the travel agencies subsector. As regards the explanatory variables, the economic profitability of the tourism sector is higher than in the economy as a whole and in the services sector, which is true for all tourism subsectors except travel agencies. In terms of size, there are no differences between tourism companies and those of the economy as a whole and those of the service sector.

Finally, capital intensity is significantly higher in the tourism sector and in all subsectors, again with the exception of travel agencies.

TABLE 4 HERE

The results of the econometric estimation using panel data for fixed effects and applying the sequential process described in the methodology are shown in Table 5. It should be noted in this regard that although the Hausman test indicates the use of fixed effects, random effects and OLS estimates were performed in order to corroborate the robustness of the results. The results appear in the annex.

TABLE 5 HERE

As can be seen, based on the results of scenario 1, tourism companies are subject to a tax burden that is 1.6 percentage points higher than all the companies in the economy. However, the tax burden is lower than companies in the rest of the services sector, for which it ranks two points above the economy as a whole. When looking at the tax burden of the various subsectors of the services sector, scenario 2, all subsectors except "transport and storage" are seen to bear an above-average corporate tax burden. However, the tourism subsector is one of the least taxed within the services sector. Only the "trade and vehicle repair" and "artistic, recreational and entertainment activities" subsectors experience less tax burden. Finally, within the tourism subsector, the direct tax burden does not homogeneously affect companies in all its subsectors. "Car rental"

and "transportation" companies are significantly less taxed while travel agencies bear substantially higher tax burdens; 7.2 percentage points above the economy average. The results therefore show that tourism companies bear a higher tax burden, but that this does not differ substantially from the rest of the services, with the exception of travel agencies, which do have a substantially higher tax burden.

5. Conclusions

In this work, the aims were first to clarify whether the tourism sector experiences direct tax overload by the CT that compensates the favourable tax treatment granted by VAT and, secondly, to determine in which tourism subsectors this situation specifically occurs. In both cases, hypothesis H1: "Tourism companies bear a greater direct tax burden in CT, producing a tax return that compensates for favourable VAT treatment" was tested. To do this, a random sample of companies from the Spanish economy was selected and an econometric estimation was made from an equation that incorporates the fundamental explanatory variables which, according to the literature, determine the tax burden for corporate tax.

In view of the results described, it can be said that the tourism sector bears a tax overload through corporate tax. However, this additional tax overload is similar to those of other service sectors that do not have favourable tax treatment in VAT, such that it can be concluded that the administration does not receive a tax return through direct taxation on tourism companies that compensates the favourable tax treatment for tourism in VAT. In other words, for the tourism sector as a whole, hypothesis H1 is rejected.

However, this conclusion is not generalizable to all subsectors of the services sector. As has been seen, travel agencies in Spain are subject to a special VAT regime

by the Sixth European Directive on VAT. This regime applies to transactions carried out by travel agencies and tour operators who purchase services from third parties, such as accommodation and transport, and then sell them on their behalf to the customer in order to avoid the problems of tourist services acquired by travel agencies in other countries. The scheme does not apply to retail agencies or those using their own means of transport or hospitality, and services provided to travellers outside the European Union are exempt. The results shown in Table 5 clearly show that hypothesis H1 does hold true for the “Travel Agencies” subsector. This indicates that this special regime may be causing a return through direct taxation. This being the case, the consequences of this result may be relevant in terms of tourism fiscal policy. The lower indirect burden associated with the European Directive would be producing a tax benefit for travel agencies that would not be passed on to tourists. In other words, favourable tax treatment in indirect taxation could not improve the international competitiveness of tourist services but could be used by companies to obtain substantially higher income. This implies that the approaches usually defended by tour operators and destination managers that “defiscalising” tourism production can lead to improvements in international competitiveness must be duly weighed. This would require specific studies to be carried out into the conditions of competition in the market and the different fiscal flows that occur with the activity of the sector.

Disclosure statement

No potential conflict of interest was reported by the authors.

Data Availability Statement

Raw data were generated at [facility name]. Derived data supporting the findings of this study are available from the corresponding author [initials] on request.

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ANNEX

Table A.1.- ETR differences by sector. Random Effects and OLS Estimate

Variable	Scenario 1		Scenario 2		Scenario 3	
	Random effects	OLS	Random effects	OLS	Random effects	OLS
Size	0.0179*** (0.0031)	0.0180*** (0.0050)	0.0192*** (0.0055)	0.0193*** (0.0054)	0.0187*** (0.0031)	0.0189*** (0.0051)
Profitability	0.0554*** (0.0185)	0.0600*** (0.0187)	0.0491** (0.0196)	0.0536*** (0.0182)	0.0607*** (0.0185)	0.0654*** (0.0185)
capitalintensity	-0.0814*** (0.0078)	-0.081*** (0.0089)	-0.0900*** (0.0109)	-0.0904*** (0.0106)	-0.0797*** (0.0079)	-0.0800*** (0.0090)
Tourism sector	0.0163** (0.0083)	0.0162** (0.0063)				
Non-tourism services sector	0.0206*** (0.0046)	0.0206*** (0.0048)			0.0206*** (0.0046)	0.0206*** (0.0046)
Trade and repair vehicles			0.0105* (0.0062)	0.0106* (0.0060)		
Transport and storage (except passenger transport)			-0.0177*** (0.0040)	-0.0178*** (0.0034)		
Information and communication			0.0445 (0.0272)	0.0443* (0.0263)		
Financial and insurance activities			0.0493*** (0.0062)	0.0491*** (0.0050)		
Real estate activities			0.0450*** (0.0071)	0.0452*** (0.0065)		
Professional, scientific and technical activities			0.0342*** (0.0057)	0.0341*** (0.0054)		
Administrative activities and auxiliary services			0.0246** (0.0108)	0.0245*** (0.0098)		
Education			0.0225*** (0.0067)	0.0223*** (0.0052)		
Health and social services			0.0299*** (0.0083)	0.0297*** (0.0078)		
Artistic, recreational and entertainment activities			0.0075 (0.0057)	0.0072* (0.0040)		
Other services			0.0200*** (0.0073)	0.0199*** (0.0058)		
Tourism			0.0167*** (0.0062)	0.0167*** (0.0058)		
Hostelry					0.0208*** (0.0105)	0.0207*** (0.0076)
Transport					-0.0262*** (0.0101)	-0.0264*** (0.0024)
Travel agencies					0.0721*	0.0721*

				(0.0285)	(0.0417)
Car rental				-0.0349*** (0.0277)	-0.0351*** (0.0050)
Cultural activities				0.0467 (0.0273)	0.0044 (0.0058)
F statistics (Prob>F)		44.87 (0.0000)			121.37 (0.0000)
Wald chi ² (Prob>chi ²)	176.8 (0.0000)		396.07 (0.0000)	462.47 (0.0000)	
R ²		0.019			0.021

Source: Own elaboration, Standard errors in parentheses. Significance level: ***: 1%; **: 5%; *: 10%.

TABLES

Table 1. Tourism tax typology

Sector	Name of tax	Payable by:
Entry/exit taxes	Resident Departure Tax/Foreign Travel Tax	Customer
	Visas/Travel Permits	Customer
Air travel	Air passenger duty	Customer
	Air ticket tax	Customer
Airports/seaports/road borders	Airline fuel tax	Business
	Departure tax	Customer
	Passenger service tax	Customer
	Airport security fee	Customer
	Airport parking tax	Customer
Hotels/accommodation	Transit taxes	Customer
	Trekking/mountaineering fees	Customer
	Bed night tax	Customer
	Bed tax	Customer
	Occupancy tax	Customer
	Differential VAT rate	Customer
	Surtax	Customer
	Sales tax	Customer
	Service tax	Customer
	Turnover tax	Business
	Hotel and restaurant tax	Customer
	Temporary lodging tax	Customer
	Hotel accommodation tax	Customer
	Lodging tax	Customer
	Fringe benefit tax	Business
Payroll tax	Business	
Restaurants	Customs and Excise	Business
	Sales tax/VAT	Customer
Road taxes	Liquor taxes/duties	Business
	Toll charges	Customer
Car rental	Fuel taxes/duties	Business
	Municipal/local taxes	Customer
Coaches	Purchase duty	Business
	Petro/diesel duty	Customer
	Purchase duty	Customer
Tourist attractions	Specific additional tax	Business
	Tourist transport tax	Customer
	Visitor attractions tax	Customer
Training	VAT and sales taxes	Customer
	Industry training tax	Business
	Catering levy	Business

Source: own elaboration from the World Tourism Organization (1998).

Table 2. Subsectors of tourist activity in Spain

Subsectors	2009 CNAE GROUP
Hostelry*	55: Accommodation services 56: Food and beverage services
Transport*	491: Intercity Passenger transport by rail 493: Other ground passenger transport 501: Passenger shipping 503: Transport of passengers by inland waterways 511: Air Passenger transport 522: Activities annexed to transport
Travel agencies and other tours operators	791: Activities of travel agencies and tour operators 799: Other booking services and related activities
Car rental	771: Motor vehicle rental 773: Rental of other tangible machinery, equipment and goods
Cultural activities*	900: Creation, artistic and show activities 910: Activities of libraries, archives, museums and other cultural activities 931: Sport activities 932: Recreational and entertainment activities

Source: Own elaboration, from the National Classification of Economic Activities 2009 (CNAE-2009) (<https://www.cnae.com.es/lista-actividades.php>) and Article 91 of the Spanish VAT Act (Law 37/1992, of December 28, on Value Added Tax).

* They are taxed at the reduced VAT rate of 10%

Table 3. Services Sector Subsectors

Subsectors	2009 CNAE GROUP
1.- Wholesale and minor trade. Repair. Motor vehicles and motorcycles	(45, 46 and 47)
2.- Transportation and storage (except passenger transport)	(49, 50, 51, 52 y 53) except 491, 493, 501, 503, 511 and 522
3.- Information and communication	(58, 59, 60, 61, 62 y 63)
4.- Financial and insurance activities	(64, 65 and 66)
5.- Real estate activities	(68)
6.- Professional, scientific and technical activities	(69, 70, 71, 72 73, 74 and 75)
7.- Administrative activities and auxiliary services	(77, 78, 79, 80 81 y 82) except 771, 773, 791 and 799
8.- Education	(85)
9.- Health and social services activities	(86, 87 and 88)
10.- Artistic, recreational and entertainment activities	(90, 91, 92 and 93) except 900, 910, 931 and 932
11.- Other services	(94, 95 and 96)
12.- Tourism sector	(55, 56, 491, 493, 501, 503, 511, 522, 771, 773, 791, 799, 900, 910, 931 and 932)

Source: Own elaboration, from the National Classification of Economic Activities 2009 (CNAE-2009) (<https://www.cnae.com.es/lista-actividades.php>).

Table 4.- Descriptive statistics

Variable	Subsector	Mean	Standard deviation	Min	Max
EFFECTIVE TAX RATE (ETR)	Hostelry	0.15665	0.35099	0.00087	14.99709
	Transport	0.13825	0.10508	0.00012	3.2874
	Travel agencies and other tours operators	0.22903	0.89861	0.00738	19.38206
	Car rental	0.10845	0.07194	0.00013	0.45024
	Cultural activities	0.14750	0.10098	0.00046	0.93281
	Tourism Sector	0.14959	0.31439	0.00012	19.382
	Non-tourism services sector	0.17142	0.57696	0.00002	93.0744
	National Economy	0.16448	0.58971	0.00002	99.2167
PROFITABILITY	Hostelry	0.15158	0.12676	0.00035	1.11176
	Transport	0.15276	0.11509	0.00097	1.45307
	Travel agencies and other tours operators	0.11807	0.13155	0.00146	0.75920
	Car rental	0.16510	0.12044	0.01032	0.8108
	Cultural activities	0.17192	0.18469	0.00302	2.11584
	Tourism Sector	0.15220	0.12620	0.00035	2.1158
	Non-tourism services sector	0.11900	0.11974	0.00005	3.22288
	National Economy	0.11972	0.12281	0.00001	12.37291
SIZE	Hostelry	2.68592	0.70164	0.74690	5.32423
	Transport	3.02243	0.64208	0.72986	6.32205
	Travel agencies and other tours operators	2.67073	0.62238	0.87704	5.08921
	Car rental	3.09912	0.61977	1.58727	4.87708
	Cultural activities	2.86825	0.77293	0.84600	6.00699
	Tourism Sector	2.85610	0.69460	0.7298	6.322
	Non-tourism services sector	2.86439	0.68347	0.59964	6.9607
	National Economy	2.89092	0.69413	0.59964	6.96078
CAPITAL INTENSITY	Hostelry	0.52717	0.28521	0.05306	0.99996
	Transport	0.40921	0.26892	0.00429	0.995271

Travel agencies and other tours operators	0.23397	0.23309	0	0.962922
Car rental	0.53975	0.26115	- 0.03233	0.99903
Cultural activities	0.49523	0.32160	0	0.9974
Tourism Sector	0.46274	0.28750	- 0.05306	0.99996
Non-tourism services sector	0.33966	0.28842	- 0.02684	0.99996
<hr/>				
National Economy	0.34483	0.27894	- 0.05306	0.99996

Source: Own elaboration

Table 5. Determinants of the effective corporate tax rate in Spain. ETR differences by sector. Fixed-effects estimate

<i>Variable</i>	<i>Scenario 1</i>	<i>Scenario 2</i>	<i>Scenario 3</i>
Size	0.0180*** (0.0050)	0.0193*** (0.0054)	0.0189*** (0.0051)
Profitability	0.0600*** (0.0187)	0.0536*** (0.0182)	0.0654*** (0.0185)
Capital intensity	-0.0818*** (0.0089)	-0.0904*** (0.0106)	-0.0800*** (0.0090)
Tourism sector	0.0162** (0.0063)	0.0167*** (0.0058)	
Non-tourism services sector	0.0206*** (0.0048)		0.0206*** (0.0046)
Trade and repair vehicles		0.0106* (0.0060)	
Transport and storage (except passenger transport)		-0.0178*** (0.0034)	
Information and communication		0.0443* (0.0263)	
Financial and insurance activities		0.0491*** (0.0050)	
Real estate activities		0.0452*** (0.0065)	
Professional, scientific and technical activities		0.0341*** (0.0054)	
Administrative activities and auxiliary services		0.0245*** (0.0098)	
Education		0.0223*** (0.0052)	
Health and social services		0.0297*** (0.0078)	
Artistic, recreational and entertainment activities		0.0072* (0.0040)	
Other services		0.0199*** (0.0058)	
Hostelry			0.0207*** (0.0076)
Transport			-0.0264*** (0.0024)
Travel agencies			0.0721* (0.0417)
Car rental			-0.0351*** (0.0050)
Cultural activities			0.0044 (0.0058)
F statistics	44.87 (0.0000)	50.99 (0.0000)	121.37 (0.0000)
(Prob>F)			
Wald chi ²			
(Prob>chi ²)			
R ²	0.0019	0.0023	0.0021
Hausman Test			
chi ²	42.19	41.62	44.42
(Prob>chi ²)	(0.0000)	(0.0000)	(0.0000)

Source: Own elaboration. Standard errors in parentheses. Significance level: ***: 1%; **: 5%; *: 10%.