



RESEARCH PAPERS

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ENVIRONMENTAL TAXES IN SPAIN

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Abstract

The economics instruments to protect the environment are present in different European Countries. In this paper we analyse the effect that one of these instruments, the ecotaxes, has on a Mediterranean country, Spain. The Economy of this country is defined by two characteristics. The first is the consideration of Spain as a Federal Country and the second the importance of tourism for the Economy.

In the first section, we show the ecotaxes in the three different levels of the Public Administration: Central, Regional and Local. In the second section, we introduce the concept of environmental taxes in the Regional Administration and we explain how these Governments have included the concept of Ecology in our fiscal system.

Finally, in the third section, we present the main arguments to show how tourism is an important factor in the protection of the environment and how the ecotaxes could collect money to finance the different expenses in this subject.

Keywords: Environmental Taxes, Spain, Regional Administration, Taxes based on Tourism

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Introduction

Spanish economy

Spain joined The Economy European Community in 1986 and The Economy Monetary European in 1999. Economy is based on the Service Sector (66% of the Gross Domestic Product –GDP-), Construction (11%), Industry sector (19%) and a small proportion on the Primary sector (4%)

The principal sector in Spain is tourism. This sector produces 10% of GDP and 12% of employment. Every year 50 million tourists arrive in Spain and each tourist spends an average amount of 50-55 euros a day. But, nowadays, this sector is in crisis because hotels, restaurants, shops and infrastructures cause some damage to the environment. It is necessary to change this model in order to get a Sustainable Development and different studies and publications agree that environmental taxes could compensate for the financial cost of this change. Further below, I will analyse a tax which has been introduced to supply the financial cost required.

Spain can also get some economic wealth through the renewable energy field. Similarly, the different Public Administrations have carried out research projects in order to promote an unpollutant energy, for instance the solar energy as Spain is a very sunny country. But, of course, a great amount of money is required to finance these projects. In different Spanish regions these research projects are financially supported by the revenues obtained from environmental taxes.

Spanish territorial division

Spain is organized in three different public administrations with their own fiscal system. The Spanish territorial organization is based on the Constitution of 1978 where the country is configurated as a federal country. So, there are 17 regional states (called Autonomous Communities in Spain) and all of them can regulate their own taxes with a limitation: a regional administration can't set taxes already introduced by the State Government. This restriction has been very positive for the different Regional States because they have created their own fiscal system based on environmental taxes and year after year ecotaxes are becoming more and more important in Spain. What is the reason?. Because when a Regional Parliament passes an ecotax, the other Lands can also choose this tax. Similarly, the environmental taxes have an important social backing in Spain and it is not difficult for the Government to pass an ecotax.

Nevertheless, the problems arise when the State introduces a high number of ecotaxes but it gets little revenue from these taxes. For instance, Andalucía, a region with seven million inhabitants, has introduced five ecotaxes in 2004, and income will be only 40 million euros.

Definitions

In Spain, there are a large number of economic instruments in the form of taxes, charges and grants related to Spanish environmental protection. But I would like to make the following distinction:

- Tax: General revenue going to the public budget.
- Charge: Revenue earmarked for a specific purpose and returned in some form to those paying it.

Essentially, a charge should be paid in return for consideration. This may be in the form of measures to improve the environment. A charge is often deemed to exist even where it is levied purely for the regulation of business and is refunded in its entirety to the sector in question in accordance with given rules.

However, in applied environmental policy it is prudent to distinguish between the terms “tax” and “charge”, as described above. In practice, there is a considerable difference between intending to treat an environmental levy as general revenue for non-specific use by the state and intending to return it to the charge payers.

Environmental taxes in Spain

Environmental taxes in Spain are small number and originate low revenues. This feature only applies to Regional Administration because the Central Administration just has waste water discharges, a tax on electricity, a tax on mineral oils and another tax on motor vehicles; but, in my opinion, only the first tax is environmental. Therefore, Regional Administration has opened the door to environmental taxes in Spain. The first ecotax dates from 1991; it was introduced in the Balearic Islands and it is levied on factories which cause some damage to the environment; two years ago, however, the Constitutional Court stated that this ecotax was the same as an already existing local tax and consequently it was dropped.

Since 1991 every Regional Administration has developed different kinds of ecotaxes. Presently, there are plenty of ecotaxes in our fiscal system. Now, we are going to analyse the current situation of environmental taxes in Spain considering three territorial levels: Central Administration, Regional Administration and, finally, Local Administration.

We briefly introduce different environmental charges and taxes existing in every administration.

- A. Central Administration
 - Waste Water Charges
 - Fuel Taxation
 - Tax on Vehicles

B. Regional Administration

- Waste Water Charges
- Water Charge
- Carbon Dioxide Tax
- Sulphur and Nitrogen Oxides Charge
- Tax on Factories which cause some damage to the environment
- Waste Charges
- Tax on Nuclear Energy
- Dangerous Waste Tax
- Environmental Tax based on Tourism

C. Local Administration

- Charge on Water
- Charge on Waste
- Other Environmental Taxes

Environmental taxes in the central administration

Nowadays, the Central Administration doesn't charge any environmental taxes if we consider an ecotax only that tax aiming to improve the environment. But, if we think that ecotaxes have also to fulfil other objectives such as generating revenue we can consider three ecotaxes: fee on waste water charges, taxation on mineral oil and vehicle tax.

Waste water Charges

Fifteen years ago, the Government passed three waste water charges that regulate different aspects of water treatment. These charges are: charge on the use of public water; charge on rubbish management and charge on regulation.

The charge on the use of public water is levied on the space taken by public water. Revenues from waste water charges revenues are earmarked. The taxpayers are the enterprises that use public water. The tax is 5% of the value of public water.

The charge on rubbish management is levied on the disposal of rubbish in public hydraulic property and the taxpayers are the enterprises which undertake

the disposal. The taxable base is based on the amount of the product that the enterprise has licensed throughout the year.

The charge on regulation is levied on the enterprises which profit from different public facilities. The revenue derived from these charges is assigned to compensate the Government for the expenses caused by the building of these facilities.

Fuel Taxation

Various forms of differential fuel taxation have been used to encourage the use of fuels with better environmental performance and, of course, the main distinction is between leaded and unleaded petrol.

The fuel tax is levied on the consumption of fuel in Spain. Now, about the 60-65% of the price of fuel derives from taxes. I would like to remember that a litre of unleaded fuel costs in Spain, more or less, 0,85 euros. In Spain this is one of the most important taxes in generating the revenue for the State and the general revenue going to the National budget. Is it an ecotax?. I don't think so because the purpose of the State Administration is to generate revenue for financial support.

Tax on Vehicles

In 1986, when Spain entered the Economic European Community, there existed an important Valued Added Tax (VAT) on vehicles in Spain, exactly 28%. Then The European Union decreased the charges and Spain only burdened vehicles with 16% tax. Some time later the State decided to introduce a new tax, Vehicle Tax, with a 12% charge. Revenue from vehicle taxes are assigned to the State budget. Is it an ecotax?. I don't think so because the purpose of this tax was (and is) to raise the taxation upon the vehicle.

Environmental taxes in the regional administration

Nowadays, in Spain the Regional Administration is opening the door to different environmental taxes present in publications and other fiscal systems. In Spain there are many different kinds of ecotaxes in the different regions, some of them well-known such as CO₂ tax but others are quite peculiar like a tourism tax that is levied on one of most important sectors in Spanish economy.

In the Table 1 we show the different ecotaxes that now exist in Spain and the year that they were introduced.

TABLE 1. Environmental Taxes in the Regional Administrations.

FEDERAL STATE	Waste Water Charge	Water Charge	Carbon Dioxide Tax	Sulphur and Nitrogen Oxides Charge	Tax on Factories	Waste Charges	Tax on Nuclear Energy	Dangerous Waste Tax	Environmental Tax Based on Tourism
Andalucía			2004	2004			2004	2004	
Aragón	1997								
Asturias	1994								
Baleares	1991								1999*
Castilla-La Mancha				2000			2000		
Cataluña		1999							
Extremadura					1997				
Galicia	1993			1995					
Madrid	1984								
Murcia						1995			
Navarra	1988								
La Rioja	1994								
Comunidad Valenciana	1992								

Waste Water Charges (Aragón, Asturias, Baleares, Galicia, Madrid, Navarra, La Rioja and Comunidad Valenciana)

Waste water Charges are a penalty which is levied on the production of sewage. These charges can be divided into two types: those regarding the origin: domestic or industrial; and those considering the consumer, the number of population and the contamination of the water.

The taxpayers are the families and the enterprises. The charge is based on the regulations of every Regional State and the revenues are assigned to the following two aims:

- The financing of the administration expenditure and exploitation of the treatment facilities and purification of the waste waters.
- The financing of the investment carried out in different infrastructures within this sector.

Water Charge (Cataluña)

Water charge is a tax with an important environmental objective because this tax intends to reduce the consumption of water among the families and the enterprises.

The charge is levied on the consumption of water and the production of waste water. The taxpayers are the families and the enterprises that consume water. The size of the tax depends on the amount of the water consumed and the discharge. The rate is 0,25 euro per cubic meter for the families and 0,08-0,26 euro per cubic metre for the enterprises.

The purpose of this water charge is to finance the following aims:

- To finance the prevention of contamination.
- To finance the costs for collection and disposal of the waste water.
- To finance the administrative costs.

Carbon Dioxide Tax (Andalucia)

The Carbon Dioxide Tax was introduced in Andalucia on 1 January 2004 and the purpose was to reduce emissions of carbon dioxide from the burning of fossil fuels. This tax is levied on the production of electricity energy when the enterprises use non-renewable energy and produce carbon dioxide.

The rate is progressive between 0,05 and 0,14 euros per ton.

Sulphur and Nitrogen Oxides Charge (Galicia, Castilla-La Mancha and Andalucia)

The sulphur and nitrogen oxides charge was introduced in Galicia in 1995, in Castilla-La Mancha in 2000 and in Andalucia en 2004 with a view to reducing both emissions from the burning of oil, coal and peat.

I only would like to talk about the tax in Galicia because it is the first and the most important one. The tax is levied on the sulphur and nitrogen oxides contained in coal fuel, peat fuel, motor fuel and heating oil. The tax is 30-33 euros per ton. The taxpayers are different oil and electrical companies. The revenues go to the federal budget and the rate can be altered by the Regional Government every year.

The revenue has been the following: in 1996, 12,945 million euros; in 1997, 13,172 million euros; in 1998, 13,248 million euros; in 1999, 13,416 million euros; in 2000, 13,742 million euros; in 2001, 14,097 million euros; and in 2002, 14,381 million euros.

But with respect to environmental effects the total sulphur and nitrogen dioxide emissions haven't fallen in Galicia because the enterprises have decided to pay the tax, instead of modifying their process of production. I think that the principal problem of this tax is that the rate is very low in comparison with other countries.

Tax on factories which cause some damage to the environment (Extremadura)

The tax is levied on different factories which are thought to cause a negative effect on the environment. So, the taxpayers are the owners of these factories and this rate is 3% of the value of these installations. The revenue is assigned to finance four projects. The first, an important investigation project on the renewable energy like eolic and solar energies. The second, the protection of the geographical areas near these factories. The third, a programme on environmental education based on a responsible use of the energy. And the fourth, the promotion of public transport.

At present, this tax is being analysed by the Constitutional Court and I think that probably this Court will consider this tax unconstitutional because its model is very similar to the first balearican ecotax.

Waste Charges (Murcia)

The waste Charges were introduced in 1995 and are levied on three kinds of contamination: the production and discharge of industrial waste; the atmospheric emissions and the water pollution charge. The taxpayers are the enterprises which cause the waste.

These charges have not been properly evaluated because once this tax was passed the Regional Government granted the different enterprises a long span of time for them to adapt their process of production to the new regulations.

Tax on Nuclear Energy (Castilla-La Mancha and Andalucia)

This is an important and innovating tax in two Federal States having their own conception of nuclear energy. In Castilla-La Mancha there are two nuclear power-stations; the tax is levied on the production of electrical energy there and also on the nuclear waste. Therefore, in the first case the rate is 0,12 euro per kilowatt/hour and 600 euros per cubic metre of nuclear waste. Revenues from the tax on nuclear energy are assigned to the State budget and in 2001 the revenues rose to 18 million euros and in 2002 more than 20 million euros.

In the second Land, there aren't any nuclear power-stations but we have the only nuclear waste plant in Spain and, of course, all the nuclear waste which is produced arrives at this plant. This tax was introduced in Andalucia on 1 January 2004 and it is levied on the nuclear waste that arrives at this plant. The rate is 7.000 euro per cubic metre. The revenues are assigned to protect the environment in the area near the plant and the Government estimates that this tax will collect, more or less, 14 million euros.

Nowadays different Regional States are analysing these taxes and it is possible that some regions introduce them in their fiscal system in the short term.

Dangerous Waste Tax (Andalucía)

This tax was introduced on 1 January 2004 and is levied on the tank of the dangerous waste in different places. The objective of this tax is double: The first, reduction of the waste at the landfills and, the second, prevention of the importation of dangerous waste from other Federal States or Foreign States.

The taxpayers are the enterprises that produce dangerous waste and take it this to the plant (there are two plants in Andalucia). This tax is based on "The Polluter pays Principle" and the costs are always paid by the producers of dangerous waste.

The Andalucian Government believes that this tax will generate about 15 million euros every year. The aim of this tax is protecting the environment in the geographical area near the plants and financing different research projects on the instruments used to recycle this waste.

Environmental Tax based on Tourism

The tax was introduced in 1999 in the Balearic Island, an important tourist resort in Spain, but this tax was dropped because the Federal Government thought, in October 2003, that it did not favour tourism. The revenues were 10 million euros every year. The charge was 1 euro per night's stay at a hotel. The target of this money was to finance different environmental programmes to the environment

such as programmes to improve the conduction of water, to protect the biodiversity or to change the agricultural system.

Nowadays, in different Lands, the Government has studied this tax because it seems it is a good solution to the important problems that the tourism sector is going through. Accordingly, Canary Islands or Andalucía, two important tourist destinations, should change their tourism system and this tax could allow them to finance the cost of these changes.

Environmental taxes in the local administration

Nowadays, there are two important environmental taxes in the different Local Administrations (water tax and waste tax) moreover some Administrations have created some ecotaxes.

Charge on Water

All the Local Government must provide their citizens with water supplied in their houses. The Local Administrations charge the citizens in order to be able to finance this demand, but these charges also pay an important Public Administration to collect enough money to protect and prevent one of the most important products in Spain: the water.

The taxpayers are both the families and the enterprises, and the charge can be progressive or proportional. At the moment, the majority of the Administrations have chosen a progressive rate. There is also an important empiric study on the importance of this tax in order to protect the environment. Its conclusions aren't very encouraging for this tax because the authors think that this tax doesn't have any impact on the environment. Therefore, different cities think that it is more important to set lower rates for poor families and an average rate for the rest of the families. And they don't pay much attention to the environmental impact.

Charge on Waste

Other service that the Local Authorities should provide the citizens with is waste collection both for the families and the enterprises. The waste is driven to the different landfills (sometimes, illegal). The taxpayers are the families and the enterprises and the rates are differented according to the number of poblacion of every city or town.

Other Environmental Taxes in the Local Administration

There are other interesting environmental taxes in the Local Administration in Spain. I would like to write about three of them: The first, a tax that is levied on the arrival of the waste to the landfills; the second, a tax that is levied on the emissions and finally a tax that is levied on the natural gravel.

The tax on landfill was introduced in 1998 in the Campo de Gibraltar, a county in the south of Spain, and it was levied the reception of waste in the only landfill. There the taxpayers were the Council and the revenue was set aside for financing programmes for environmental protection. In 2001, however the tax was dropped because certain Council didn't agree to pay this tax.

Local Tax on emissions was introduced in 1997 in a small city of Galicia, in the North of Spain. The reason why this tax exists: there is there are two important polluting enterprises in this city. The revenue is set aside for the general budget.

The Tax on natural gravel was introduced in 1996 in a small city in Andalucia and it is levied on the extraction of natural gravel, concretely marble, since this city is an important international marble center. The revenue collected is assigned to the general budget.

Environmental taxes based on tourism (Balearic Islands)

At the present time, tourism is one of the most important economic sectors in Spain and it generates 10% of GDP. Every year more than 50 million of people arrive in Spain and they spend, more or less, 50-55 euros per day. And, of course, every day many Spanish people visit other places or cities in their country. The main charm lies on the natural, cultural and environmental resources of other regions. Still, it is tourism that destroys tourism. Prices should therefore reflect the environmental costs and public intervention is needed in this respect.

The Balearic Islands seem an interesting place to start environmental taxes based on tourism, being the most important tourist places in Spain as far as number of tourists is concerned (11 million) and the number of revenues (6.000 million euros). Tourism makes up 85% of the active income at the Balearic Islands. The expectations for the revenues of that tax exceed 72 million euros per year. In Andalucia, on the Canary Islands and in Catalonia, similar initiatives have been examined in the meantime. The total numbers of overnight stays in Spain show that in the year 2003 70 million foreign tourists came to Spain. 65% of them spent at least one night in Spain. Out of 230 million overnight stays in hotels, hardly 2,5% were spent in 5-star-hotels, while 27,5% were spent in 4-star-hotels and 43% in 3-star-hotels, but it is the number of stars in the hotels that decides about the amount of taxes.

Balearic Island introduced its environmental tax based on tourism in 1999 and its principal reason was to create a fund for the rehabilitation of tourist areas, as a financial mechanism for the redesign and rehabilitation of tourist resorts and the recovery of natural resources, natural areas and heritage of relevance to tourism. The yearly revenue for the fund is solely and exclusively for the purposes of expenditure directly related to the objectives specified in the previous section.

Although, on a colloquial level, this tax is known as the "ecotax", in reality it is a direct tax levied on stays by individuals, whatever their place of residence may be, in tourist accommodation in the Balearic Islands, as can be seen from the said Act. The taxable base, therefore, is the stay in tourist accommodation in the Balearic

Island, calculated per day or fraction, and the taxpayer is the visitor even though it is the tourism company that collects the tax and transfers the revenue to the Federal Government, thus acting as a substitute for the taxpayer. So, the substitute is responsible for the settlement, paying in and submission of the declaration in the place and within the time limit established by legislation. Children (up to 12) are exempt from the tax, in addition to says subsidised in accordance with the social programmes of any European Union member State (for instance, Spains' social programmes based on tourism).

In order to determine the taxable base, three possible systems are proposed: flat-rate, direct and indirect systems. The amount of tax is calculated by multiplying the number of days by the tax liability, which is always a fixed amount per day or fraction, in accordance with the following rates:

- 5-star hotels and 4-key apartments: 2 euros
- 3 and 4-star hotels and 2 and 3-key apartments: 1 euro
- 1 and 2-star hotels and 1-key apartments: 0,5 euros
- Rural and inland hotels: 1 euro
- Campsites or tourist camps: 0,75 euros
- Rural tourism: 0,25 euros

Nowadays, this taxes is not present in the Spanish fiscal system because Regional Government of Balearic Islands thought that this tax was very bad for the economy of the Islands and decided to drop it in 2003.

Conclusions

Nowadays, there are many classes of environmental taxes in Spain but their revenue is very low in comparison with other countries'. As far as State Administration is concerned there is only an environmental tax and the same of money collected.

I think it is possible the National Government introduces environmental taxes soon as the Spanish citizens are becoming more and more concerned about the environment.

The second administration, Regional Administration, is presently the door for environmental taxes in Spain. There are 17 Lands in Spain and everyone intends to protect their environment and accordingly they are introducing ecotaxes.

Finally, the Local Administrations includes two ecotaxes.

Now, we are to introduce a list of some of the desirable characteristics we consider environmental taxes should have:

- They are efficient, at least in theory, they allow the environmental goals to be reached with the least costs.
- They are effective because help to improve the quality of the environment.
- They can reduce taxes in general
- They are incentive for technological advances
- They are flexible and easier to adapt than direct regulations
- They are a potential source of revenue in the public sector

But we also consider disadvantages:

- If the information does not work well, the results are less secure
- They could have negative effects on competitiveness
- They are less accepted by economists than direct regulations
- If they are effective, they reduce their own taxable base

Regarding the future, my main conclusions are three: first, Spain should introduce different ecotaxes in the Central Administration system such as a Tax on CO₂ emissions; secondly, the Regional Administrations must introduce a tourism tax in order to finance the changes in this sector and to get a Sustainable Development; thirdly, tourism should be one of the most important sector in the introduction of environmental taxes in Spain because it generates a lot employment and revenue causes a lot damage to in the environment.

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