

# INTERNATIONAL COUNTERPARTS CONFERENCE

## SYDNEY, NOVEMBER 15-16, 2007

### AN APPROACH TO CLIMATE CHANGE

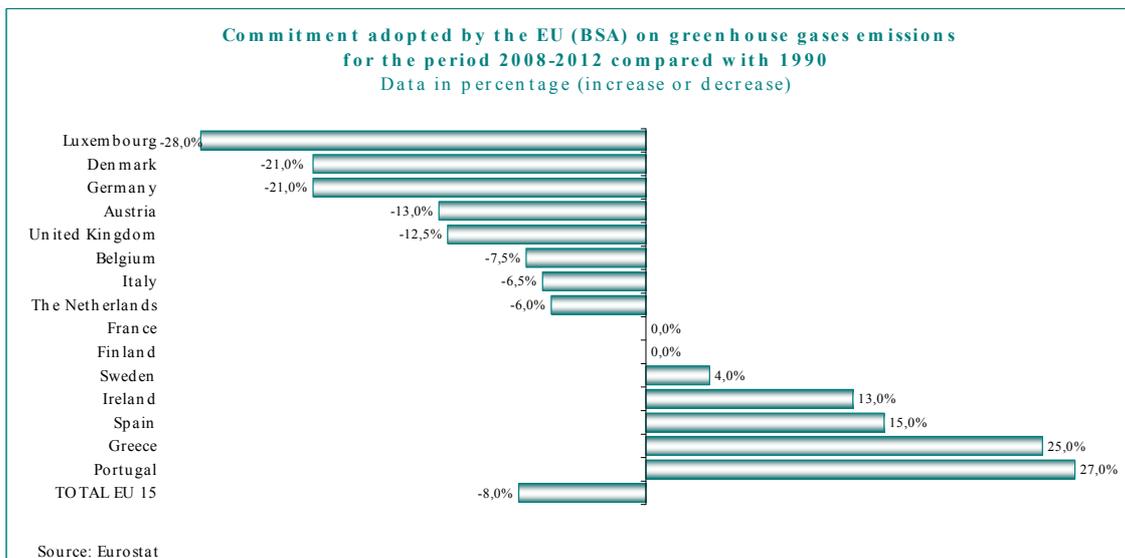
Claudio Boada

Chairman - Círculo de Empresarios

Good morning. I would like to thank CEDA for organising this conference, and to all of you for your attendance.

I want to make a presentation on the Spanish situation as far away as possible from the political contents that the issue of climate change has in my country, as in so many others. In my country, this matter has become an object of passionate debate, nourished by the prominence of some positions which have been very gossiped by the media, some doubts about the credibility or the rigorous approach of the scientific data usually mentioned, and the important fact that it is an easily-thrown weapon between political parties, above all with a view to the electoral struggle that will take place in Spain next year.

I intend to express my opinion from the economic standpoint of the problem. But first, I would like to tell you something that is crucial to understand the Spanish case, directly linked to the Kyoto Protocol, signed by Spain and from which derive certain consequences and commitments. In this regard, I have to underscore that the Spanish position has ended up worse than what it should be in comparative terms with other countries of the European Union. As a member of the EU, Spain decided to align itself in 2002 with the commitments of the Kyoto Protocol, even though it had not yet been put into effect.



This graphic shows the “Burden Sharing Agreement” of the European Union or the commitment on greenhouse gases emissions for the period 2008-2012, with reference to 1990. With the reduction objective (8%) assumed in Kyoto, the EU predicted the creation of an emission rights market under the system called “cap and trade”. Under this system, each Member State was obliged to submit, in April 2004, an allocation plan concerning rights of emission, among them the licenses assigned to each industrial plant as a starting point for the proper operation of the emissions trade.

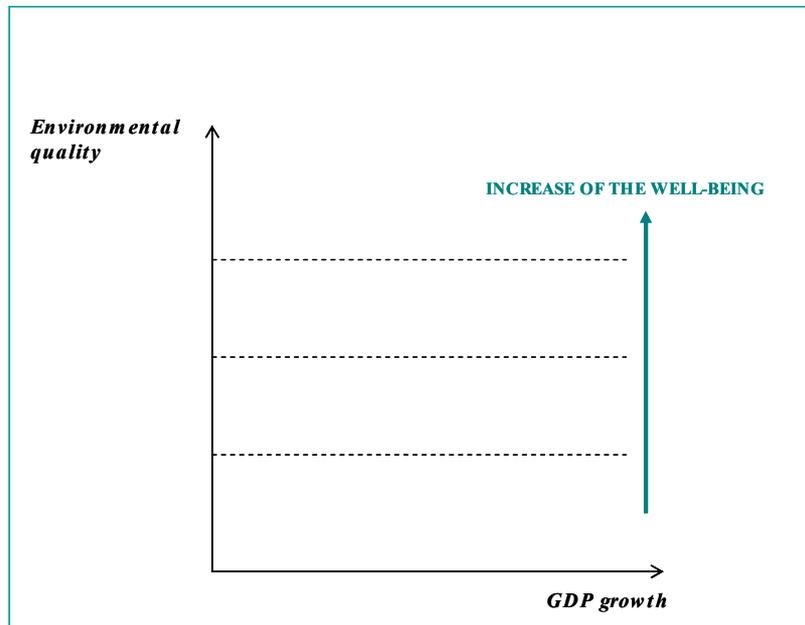
After all, what came to birth like an expert market system has turned into a system of income transfers among both, countries and technologies. It would have been more equitable to use average emissions or a “benchmarking” system, where the emission rights are not related to total emissions but to the emissions in excess which could be generated by an industry or plant equipped with the best technology.

Although, at first sight, the distribution of emissions within the European Union favoured Spain, a more detailed analysis shows otherwise. From 1990 trough 2004, the Spanish GDP increased 44% in real terms; this percentage is significantly higher than the one of other important European countries. In 2002, Spain exceeded up to 40% the level of emissions obtained in 1990, while some of those countries had reduced their level in the same period. In any case, and this is the important fact, in spite of the rapid increase of the convergence level, the Spanish emissions per capita keep on being lower than the European average figure. However, in theory, we should decrease our current emissions to only 15% more than in 1990. This is a goal which seems to be difficult to achieve, not to say impossible in my opinion.

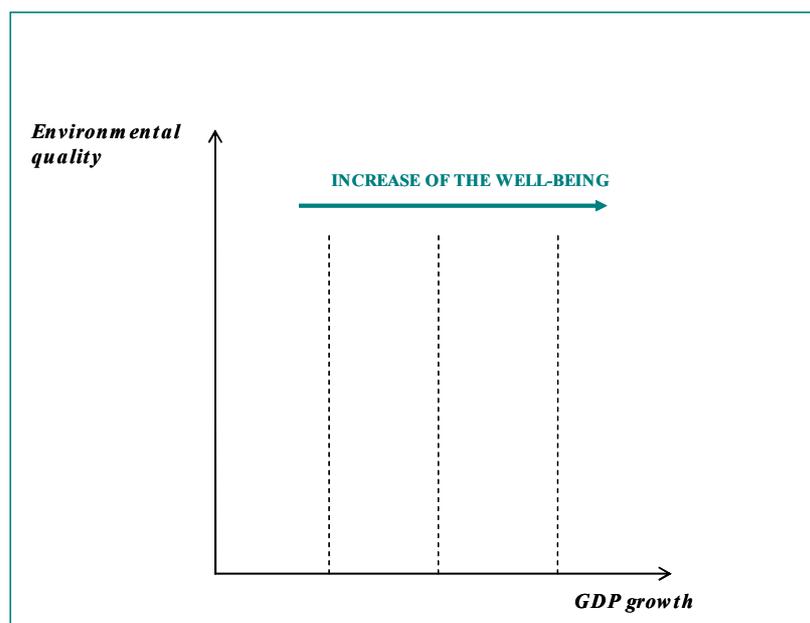
Going back to the analysis I mentioned at the beginning of my remarks, and from the economic theory standpoint, climate change can be characterized as a market failure. Therefore, we assume a negative external influence, since it is the result of the over-exploitation of resources which are not supposed to have any owner. In other words, whoever contaminates does not take into account the damages caused, since he does not have to pay for that. This has, at the same time, a global impact, because the emission of greenhouse gases has an effect that does not make any difference among national borders. This means to assume, at least partially, that there is a certain correlation between climate change and human activity.

Nevertheless, this statement should not question the principle that markets operate properly in general terms, since there are different ways to correct those possible failures. All societies are faced with market failures and tackle them without major problems. And last but not least, public action shows mistakes as well (the regulator’s mistakes); therefore its superiority cannot be argued as far as climate change matters are concerned.

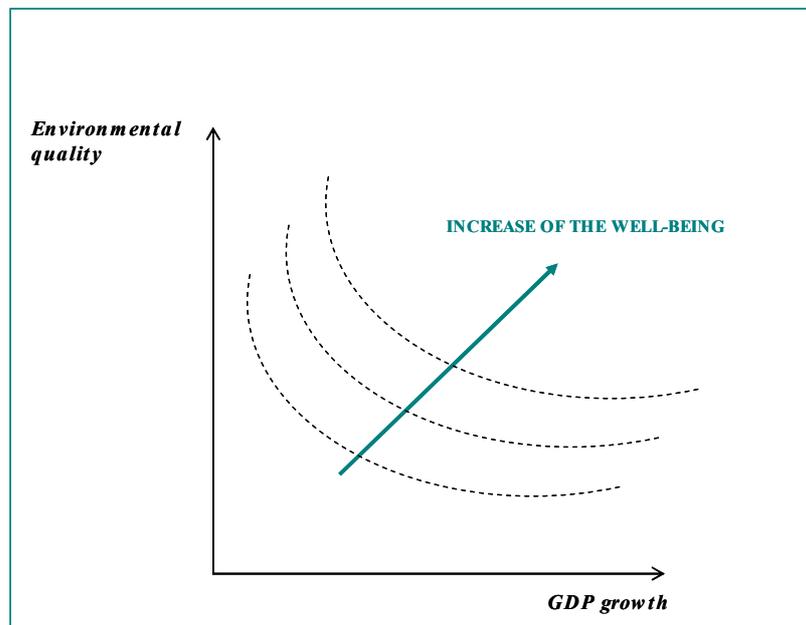
In the climate change discussion, two contrary positions are usually compared:



There are those who defend nature above all and put environmental quality before any other consideration. Their most extreme followers would presumably advocate a return to a pre-Industrial Revolution economic model.



We also have those who primarily value the well-being that results from economic growth. They don't give any value to environmental defence, because only economic growth brings them profit.

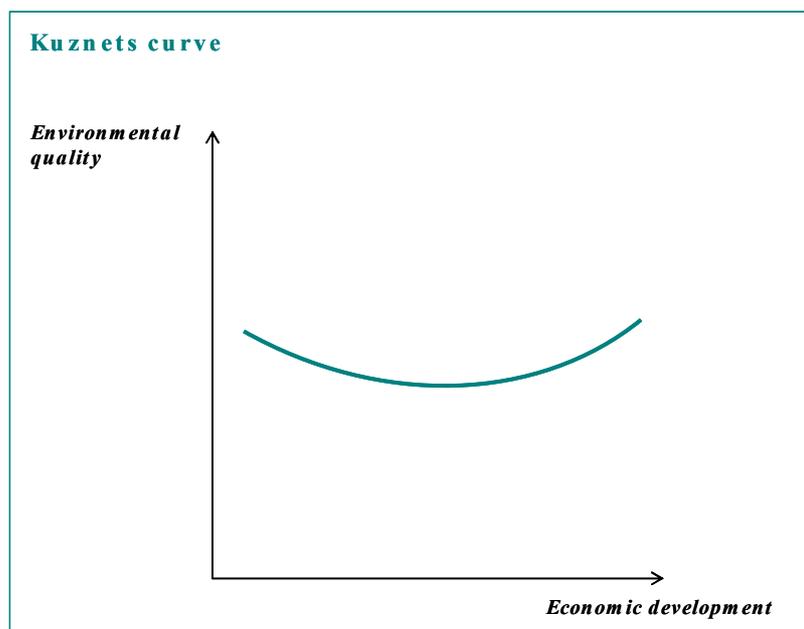


In practice, these two positions are not genuinely representative of society's general perception, because most people deem better to combine economic growth with environmental care. The greater the amount of both goods, the more the well-being achieved.

Therefore, we should not set up economic growth against environmental quality, although the relationship between both of them is complex and difficult. In this regard, we have to take into account three different effects which are interconnected:

- First, the scale effect, according to which, if nothing changes, the larger the GDP of a given economy, the more use of natural resources takes place and, consequently, the bigger environmental damage is produced.
- Second, the composition effect, because not all the productive sectors are equally harmful to the environment. For instance, industries differ on their energetic intensity, as well on their CO<sub>2</sub> emission.
- Finally, the technological effect. New technologies can help maintain the current levels of production or even increase them, while better controlling greenhouse gas emissions.

The problem is that the combination of these three effects has uncertain results which vary depending on the countries. The empirical evidence does not totally clarify the matter. It seems that the environmental Kuznets curve is the one which represents it better.



According to this hypothesis, the environment tends to deteriorate in the first stages of economic development, to start recovering once a given society has reached enough material well-being to motivate the demand of a higher environmental quality.

In the specific case of Spain, it is necessary to improve our position in the negotiations to apply the Kyoto Protocol, so that the system applied shall promote the use of the most effective environmental technologies, unlike what is happening at present. It will be both a very technical and difficult discussion but a necessary one in order to develop a future strategy for our country in this field.

With regards to this strategy, we have to differentiate three aspects:

- Although it is true that we face an international problem, it is of the utmost importance that Spain has its own analysis instruments. Thus, it is necessary to develop, together with the cooperation of public and private institutions, the models for analyzing the different scientific scenarios, as well as the economic consequences that the country may suffer due to the use of one instrument or the other. It shall be pointed out that some of the models which are being currently used in the

international negotiations are technically weak, while higher quality alternative models are not proposed. This restrains our capacity of negotiation. On top of having a good overview on the specific effects for Spain depending on one or another alternative, the existence of Spanish models provides our negotiators and regulators with a higher capacity of discussion. Only this way can we guarantee the adoption of any measure preceded by a rigorous analysis of both the current situation costs and the alternatives proposed.

- Second, the pre-eminence of market instruments that limit public interventions to those measures strictly necessary to prevent possible failures. Although, in theory, there shouldn't be main differences between the use of one or another, in practice that isn't the case due to the various problems that arise when "command and control" regulations are applied. Nevertheless, when the necessary conditions for its proper functioning come up, market stimulates activities conducive to minimising costs and to better exploitation of scarce resources. In this landscape, we can consider taxes and tributes in general, the fiscal costs and subsidies, the development of activities that improve information about the polluting effects of products or services, the systems of marketable licenses or the voluntary agreements between the Administration and the most affected sectors.
- Third, the improvement of the Spanish economy capacity of adaptation. Only adapting ourselves to an uncertain environment which will probably change rapidly towards unknown directions, we will achieve that the concern about environment becomes an opportunity of growth, instead of a cost. At the same time, all this will depend on several factors like the human capital sensitivity, the organization flexibility and the innovation capacity of the Spanish economy.

This is not an easy subject to cover in such a short time and I am now at your disposal to try to answer your questions. Thank you again for your interest.