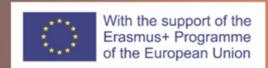
## Digital Transformation of Tax Administrations in the EU

JEAN MONNET DIGITAX PROJECT International Conference

From 25th April to 26th 2022

Recorte rectangular







Taxation Principles for a digital Administration era
Dr. CRISTINA GARCÍA-HERRERA BLANCO, Academic
Chairman (Institute for Fiscal Studies of Spain)

April 25, 5:15, pm (CET) Session 1

With the support of the Erasmus+ Programme of the European Union



Thank you very much for inviting me to this conference. Digital transformation of the tax administration in the European Union. Thank you, Alvaro, for the organization and thank you to all of you for attending this conference this afternoon.

I would like to share with you some of my views on on this topic and the purpose of my presentation is to analyze the essential principles for the AI regulation in its use by tax administration.

My presentation will try to answer too many questions. The first question is.

Whether there is a need for an AI regulation in the public sector and furthermore in the taxation field?

If the answer is yes, a second question to answer would be what regulation of the use of Al is necessary and on what principles should it be based.

Well, regarding the first question, my opinion is that such regulation is necessary. Regulation of the use by the public sector is necessary.

As already demonstrated by the European General Regulation on data protection.

In addition, I believe that the tax field due to this, its specialization, needs a particular regulation. Specifically with regard to the use of Al algorithms for control purposes.

In this area, the basis of its use is to make effective the constitutionally recognized duty to contribute to the support of public expenditures.

We know that the use of AI poses challenges, but it is also an opportunity and I think it is a great opportunity for tax authorities.

Sony has said that before and I feel I fully agree with him.

Artificial intelligence has already shown itself to be a technology of enormous potential, and the European Commission has stated that it is one of the most strategic technologies of the 21st century. All is a combination of data and algorithms that make it possible to emulate human intelligence.

But what is relevant is the data, its quality and above all its volume. Hence the recent interest in Al due to the substantial increase in the availability of data. The Economist stated data is the oil of this century.

Tax authorities must take full advantage of the opportunities that this technology offers.

However, in order to do so, it is essential to ensure that the technology is used properly, and this requires first the existence of appropriate limits and controls, and I think that limits and controls in line with our values.

And 2nd to generate a greater confidence in this technology on the part of everyone, and in particular in the part of the citizens.

The advantages of AI are clear. AI allows for a more efficient tax administration, one that helps and facilitates compliance by taxpayers, and one that allows for a better fight against tax fraud. However, the risk risks associated with the use are also relevant, and they are a growing concern.

In this regard, as we know, there is a an effort to strengthen the ethical perspective of Al, incorporating ethical values and principles.

Although I would like to draw attention.

To the idea that it is not just an ethical issue, it is. It is a question of real legal significance. The use of AI can violate countries legal systems.

Most countries at this moment have no regulation of the use of AI, something that will have will have to happen in the future and in this situation there is a need to identify and strengthen the principles that must govern the use of AI and guide the actions of tax administrations in order to protect the rights and guarantees of citizens.

Then I will try to answer the second question on what principles should be based AI regulation in the taxation field, and I think that we I I would like to highlight four principles.

Prudence, non discrimination.

Proportionality we were talking about that and transparency.

Starting by the principle of prudence, or or, the existence of a potential approach.

Am I in fact is a new reality, especially in terms of data availability? This confronts us with an unknown situation and as such requires caution and prudence in the adoption of the technology, and I think this is something that countries really have to bear in mind.

This principle of prudence have implication in several areas.

On the one hand, the complexity of algorithms should be taken into consideration, starting with use of low intense artificial intelligence.

The scope of the products in which in which it is used should be also be limited with the aim of progressing as a result become certain.

And on the other hand, it is essential to adopt pilot programs which make it possible to test the results in a concrete and provisional way. Introducing portion before a generalized application of these tools.

Furthermore, the prudential approach must also be present when assessing the validity of the conclusions coming from from programs developed by artificial intelligence. Such conclusions should not replace the work carried out by people in our case tax administration officials, but should complement them. It would be unwise to delegate decision making to AI algorithms. Because AI should serve as another mean for civil servants to make decisions in their work of applying the tax system but not replace them.

I believe that tax authorities should be extremely cautious because the reputational damage of not doing so may outweigh the gains of any project in the short term.

The second principle is the principle of non discrimination and with several implications to. On the one hand discrimination could exist in the configuration of the algorithm itself.

Algorithms are fed with hypothesis elaborated by scientists, which implies the risk that human errors or their basis could be transferred to the algorithm itself.

Which we obviously condition the validity of the new hypothesis and the results as explained by the European Commission. If we do not take this dimension into account, artificial intelligence can lead to undesirable results such as creating an echo chamber where people only receive information that corresponds to their opinions or reinforcing discrimination.

This is the case of an algorithm that became racist in 24 in 24 hours due to the exposure to racist material.

And on the other hand, discrimination should also be avoided, and this is very important in the data set

The establishment of requirements is recommended. Obligation to use data sets that are sufficiently representative, especially to ensure that all dimensions of gender, ethnicity, and other possible reason for unlawful discrimination are correctly reflected in these data sets.

The the third principle is the principle of proportionality and the use of proportionality is a key principle of our legal system. In general, the use of artificial intelligence by the tax administration also requires an approach based on the principle of proportionality. In this sense, what I believe is that it's very relevant to take into consideration the degree of interference.

In the right and guarantees of taxpayers with the decision derived from programs that use artificial intelligence. Christina sorry, excuse me because we are not seeing your your presentation. Yes, I can see the presentation.

I can see I can see perfectly yes very much.

We can see it.

I only have in fact I only have 3 slides. Then it's not very important I think, so it's some the problems of some of us.

OK, then I was saying that I was speaking about the principle of proportionality and by way of an example at this time could be made between the impacts for example of sending a letter to a taxpayer taxpayer warning him that the tax administration has certain information on on his tax situation in which artificial intelligence has been used to encourage his steel voluntary.

Compliance with respect to the initiation of an an audit or an inspection carried out on the basis of a decision based on particular artificial intelligence.

According to this rezoning, this principle should be should lead us to the highest caution when fundamental rights may be affected. A decision adopted by AI by itself should not be sufficient motivation for an action of the tax administration if it may involve the violation of our fundamental right. But in fact, what I think with this principle is that.

The the answer is we have to see this case by case. We have to assess the the end or the purpose of of the measure and the interference interference that is is made by by this measure.

The 4th principle is the principle of transparency. We know it is one of the key principles when we speak about AI. This is an essential principle that seeks to protect taxpayers avoiding a violation of their right to defense.

•Transparency is essential to avoid possible abuses.

But the problem that arises is that AI algorithms are surrounded by a certain opacity. This problem is particularly intensified in the most advanced AI modalities in the deep learning modality in which the algorithm emulates complex neuronal networks. Extracting patterns from masses of data. It is not possible, not even for the engineers who have configured the algorithm to determine the logic. In the algorithms decision making process, this is what is known as the black box, one of the greatest challenges for the future.

So far there is no response response from from our law and it is not easy to regulate this issue. In the taxation field in some cases.

I think that early transparency may not be compatible with the exercise of administrative power by tax administrations. Let us think of the initiation of a tax audit procedure in which the surprise effect is essential to achieve the expected result.

Avoiding evasive maneuvers.

It is certainly not a transparency that exists today with respect to the decisions to initiate a monitoring procedure with traditional tools, since, for example, in Spain the inspection plans of the tax agency don't make public who is going to be audited, nor why only the criteria.

I think that we have to to think that on the one hand there is a duty of of taxpayers to to endure tax audit. But on the other hand there is a right to be treated equally and without discrimination with respect to others.

It is important that taxpayers should not be defenseless so that they can know how the decision has been taken through artificial intelligence, giving them the possibility of defending themselves if the decision has been arbitrary.

I think it is a matter of enhancing the expandability of algorithms.

In the words of the European Commission, it must be it must be possible to reconstruct how and why it behaves in a certain way, so that those who interact with this system must know that it is artificial, intelligent as well as which people are responsible. This expandability is possible. It's true in Rule based AI systems, but becomes very difficult in in the modalities known as deep learning. A problem that that that is very difficult in in our days, but specific measures to promote explanation expandability are possible.

For example, first external auditing of AI systems to ensure the proper functioning. Checking the principles on which they are based and controlling the absence of discrimination or bias. Or secondly, it is also possible to opt for exposed certification as a condition for the validity of the decision taken in comparative law. It is worth mentioning in the case of France.

I think it's a reference country. In this field the the French model included in the low for the Digital Republic foresees the right of the administration to be aware of the use of algorithms for individual decision making in order to avoid the possibility of ignorance by citizens of administrative decision based on artificial intelligence.

Likewise, in France, citizens have the right to have information on the functioning of the algorithm, how and to what degree it has contributed to the decision making the data processed and the processing parameters.

And I would like to finish with.

Speaking about the importance of of these principles, but also it is very important to reinforce information governance. The tax administration are holders of taxpayer data data and must ensure the correct collection and use of such data surrounding themselves with measures to promote good information governance on the one hand, they must ensure a data security.

As well as respect privacy and confidentiality.

In addition, administration should also take responsibility for the quality of the data, since not all the information they receive has the same value and and the same value. Yes.

A good integration of all the information should be encouraged. Improving the data set that the databases of tax administrations and my final remarks. Some conclusions. All is a strategic strategic technology tax administrations must have the most of this opportunity and they are in a privileged situations since as we know the success of this technology is based on data.

In particular, its quality and volume and tax administration are increasingly in possession of taxpayers information.

However, the risks posed by Al require careful use and a reflection on the principles that should inspire its regulation and the application to this is a question of balance which we must try like. On the one hand, we cannot miss the opportunity that technology offers. Of course, for these beyond investment in technology or in human resources.

It provides adapted to it. It requires first the use of AI in favor of the taxpayers themselves, and 2nd the existence of well defined limits that protect the rights of taxpayers.

I think that tax administration that are able to develop AI to its full potential respecting the principles will have a competitive advantage over others.

At the same time, they will be able to provide better services to their citizens. Why fighting, uh fraud better thank you very much.









