

# ROBOT TAX

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## Gerd Leonhard, Humanity Against Technology - The Coming Conflict between Man and Machine

*"The change in humanity in the next 20 years will be greater than in the last 300 years. Perhaps in your lifetime you will see unimaginable horrors of human ingenuity"*

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Today, there is a robot revolution that we are closely experiencing. Firms in different sectors are adapting to developments in robotics, artificial intelligence and (service) automation to reduce costs, expand production/service capacity, increase productivity and quality, ensure the sustainability of product quality and increase the competitiveness of the firm

It is estimated that in the next decade, interconnected, adaptive and self-learning machines, tools and programmes, i.e. robots and robotic automation processes adapted with artificial intelligence, will significantly change working life in almost all sectors of production and services. This will not only affect blue-collar workers, but also white-collar workers, where machines have replaced human workers since the beginning of the industrial revolution

The problem will lead stagnation in business, increase in income inequality, alienation of people from business life, and decrease in labour participation. In other words, it is now clear that there be a "significant rupture " in society, and the state should take measures - in the specific context of tax law - to protect labour.

## Recognising the Legal Status of Robots

As robots are increasingly replacing human activities, discussions on granting them a legal status have started and in this context, on 31 May 2016, the European Union Legal Affairs Committee published a report on the increasing importance of the use of robots in all areas of modern society, such as production, trade, transport, health, education and agriculture. This Report was adopted by the European Parliament on 1 January 2017 and it was stated that robots should be recognised as "electronic persons ".

In order to accelerate the studies exclusively addressing the civil liability of robots and to support the work on a uniform legal system for the civil liability of robots, especially in Europe, the European Parliament published the Draft Recommendation Report of the Legal Affairs Committee on Robotics dated 27.01.2017, followed by the adoption text dated 16.02.2017. The said report is important as it is the first legal text that aims to introduce supranational uniform legal regulations on robot law and artificial intelligence and provides guidance with its recommendations

Current legal regulations human beings as subjects. However, since it is possible that artificial intelligence will be used in robots and thus the robot will be able to learn, ethical discussions that may lead to the conclusion that the robot will be considered a subject in the eyes of the law because it is responsible for its conscious actions will increase in the future

## Substitution of Robots for Real Persons in Employment

There are three different views on the effects of new technologies on employment. According to "optimists", information technologies will increase employment and improve the quality of working life. According to "pessimists", the substitution of labour by machines will increase unemployment

The concept of "technological unemployment", introduced in 1930 by John Maynard Keynes, who made an assessment of "the economic prospects of our grandchildren", , in the most general terms, that new technologies put people out of work. John Maynard Keynes made the following statement in 1930: "We are suffering from a new affliction which some readers have never heard of before, but which they will learn in years to come; namely, technological unemployment

21st century, smart factories, which can be considered as the biggest production revolution that will affect the 21st century, are places that do not need manpower in production and provide completely unmanned production and include new relationships between automations, robots, informatics, production and labour, etc

In a study investigating the effects of technological developments on the labour market, a research was conducted on 46 countries and more than 800 occupational groups. Accordingly, it is stated that 400-800 million people in the world will lose their jobs by 2030, and one out of every five employees will be affected by the inclusion of robots in the production process. According to the results of the research conducted on the basis of the USA and the EU, the employment loss resulting from each robot will be 6.2 people for the USA and 3.4 people for the EU

## Taxpayer Status of Robots: Legal Unrecognisability in the World of 2025

Today, in order to accept that robots should be registered as a taxpayer and pay tax from the activities (work or service) carried out by robots, the "electronic payment capability of robots" should be accepted so that "special tax liability" can be discussed. However, today, it does not seem possible for robots to be subject to a definition within the scope of neither income tax nor corporate taxpayer.

The fact that robots cannot be likened to real persons within the scope of income tax is based on two reasons.

- real persons are taxed as active members of society according to their ability to pay, taking into account the priority of public order in society and the redistribution of income and wealth.

Real persons are subject to taxation equally depending on their ability to pay, and there is no such determination for robots.

- paying taxes is also a reflection of the right of real persons to exercise their rights and freedoms and the principle of "no tax without representation".

robots cannot be considered as real persons within the scope of income tax, because their ability to pay in terms of income or consumption cannot be measured and they do not have the right to choose.

In addition, withholding obligations cannot be imposed on companies that employ robots instead of humans in terms of withholding tax on wages and wage income; because these taxes are paid by deduction at source and even if they are legally paid by the employer, it is a tax burden to be paid by the real person entitled to the wage as a result.

Therefore, from the perspective of income tax, there is not yet a discussion about robots being taxpayers. The concept of a robot tax is generally advocated for governments to provide fiscal instruments to substitute for the reduction of wage taxes with the increase in automation

## CIT PERSPECTIVE

From a corporate tax perspective, in order for a robot to be held liable as a "taxable person", it must be characterised as a "corporation". In principle, the taxes to be applied to corporations are determined; however, it is unclear how this will be applied to robots. Essentially, corporate tax is levied on the company's earnings and is easy to audit administratively. But of course, this is not the case for robots. Moreover, robots do not have sufficient autonomy to own or manage assets on their own behalf. In other words, robots are the property of the company that uses and/or employs them and are only used to generate corporate income. Taxing robots on the grounds that they generate income on their own behalf will lead to a lot of confusion in the tax system. Because the calculation of the corporate tax (or similar) on the income derived from ownership use of robots will become even more complicated



In order to levy taxes on robots substituted for real persons in the workplace or on their use, a special tax status would have to be recognised for robots. This situation brings with it discussions on granting legal capacity to robots by recognising a new legal personality in tax law. Similarly, it is also possible that the criteria used in the definition of other legal entities can be used in robots and defined as a separate personality in order to provide a legitimate basis such as existing institutions

## Decrease in Tax Revenues against Increase in Corporate Earnings

The large-scale replacement of humans by machines would first and foremost call into question the tax system, since most income taxes are based on the earnings of wage earners through withholding taxes on wages, and it is unlikely that the same tax burden could be placed on services performed by machines (whereas innovation is often incentivised by low tax rates and depreciation). In the case of technological unemployment, governments also run the risk of losing large-scale income tax revenue and will probably not be able to finance social security for workers who have lost their jobs due to robots

"The important question that needs to be answered here is how to make intelligent robotic automation for tax collection. Let's assume that 100 people in an automated manufacturing plant pay USD 500 in taxes every month. If this factory decides to automate the work of these 100 workers, the tax administration will not be aware of the increased earnings of USD 500,000. The only way to prevent this is to complete the tax collection by applying additional corporate income tax for this company

## THE NECESSITY OF ROBOT TAX IN THE TURKISH SYSTEM

There is no specific definition of robotics in Turkish tax legislation; however, all processes are carried out as part of Research and Development (R&D) activities in the field of informatics and such investments benefit from various tax incentives.

Investment tax incentives are measures operated through tax systems that provide benefits through the reduction of a tax that would otherwise be payable and corporate tax exemptions are one type of such incentives.

Activities related to robot technologies are included within the scope of R&D activities and are subject to discounts and exemptions depending on whether the taxpayers operate within the scope of Technology Development Zones or not.

## Social Intervention of the State in the Economy

According to Article 2 of the Constitution of the Republic of Turkey; "The State of the Republic of Turkey is a democratic, secular and social State of law".

## Robot Tax Concept *Purpose and Scope*

In an interview given by Bill Gates in 2017, he stated that "if people today are taxed on the income they earn and robots do the same job, it is reasonable to think that robots will need to be taxed at a similar level", although the form of taxation is not entirely clear, he expressed the view that the earnings generated by robots should also be taxed. What is really meant to be explained is the "robot tax", which envisages the taxation of a robot at the same level as a human employee doing the same job, and envisages a new system instead of taxing wage earners substituted by robots. Its aim is to increase revenues and protect the functioning of the tax system in the face of this change

In some studies in the literature, the concept of automation tax" has instead of the concept of "robot tax"; however, while defining the automation tax as follows, the measures to be taken against the employment of robots instead of real persons are also included:

a) "In the application of the automation tax, in cases where a robot is employed instead of a human, the withholding tax, which is not made from the wages of humans, can be considered as the wage that those humans will receive when robots take the work done by humans, and the tax base can be calculated on this basis.

b) "Tax neutrality between human and machine workers can be achieved by implementing some of the following options, either singly or in combination: no tax deductions for automated labour for corporations, an "automation tax" to be charged in the event of unemployment, offsetting tax benefits for natural person workers, and raising corporate tax rates, no corporate tax deductions for robot workers, an automation tax on corporations, and tax benefits for natural person workers

## PROPOSAL OF ROBOT TAX CONTEXT

- 1) Attribution of income to robots - imputed income: If a job equivalent to the work performed by the robot is performed by humans, the salary to be paid by the employer will be fictitiously attributed to the robot and subject to tax. In this case, the taxpayer would be the employer. However, determining imputed income is difficult.
- 2) Companies using robots pay social security contributions
- 3) Reduce tax deductions for investments in robots
- 4) Imposing an "automation tax" on organizations that employ robots and lay off workers
- 5) An additional tax on the purchase or use of robots

However, whichever method is chosen, the robot tax is a problematic area because it will not be an effective method to achieve this objective when a complementary tax is applied. A regulatory tax could achieve this goal, but the goal itself would be problematic. Taxing robots in both arrangements (equalizing - complementary tax and taxing the use of robots) will bring about a lot of conceptual, economic and legal debates.

Tax policy is often explained by the following statement attributed to US Senator Russel Long: “Don't tax yourself, don't tax me, tax the person behind the tree”. The “others” referred to here are those we don't like. Robots are undoubtedly disliked by a significant majority, if not all.

Two important tests need to be applied when developing a tax policy:

- a) Is determination by tax policy the best way to solve the problem?
- b) If yes, what is the best way to solve the problem?

## ROBOT EDUCATION TAX PROPOSAL

States should levy a specially dedicated tax, called the education tax, to support training that provides skills to adapt to new economic conditions. This tax should be completely uncomplicated, levied on all taxpayers and spent on short-term technical courses.

## Gerd Leonhard;

*"When thinking about how to create our future, it is important to understand these two twin concepts: The first is "all at once" and the second is "first and then ". Think of solar energy, automated cars, digital currencies and digital money transfer via blockchain: They all took a long time to get to where they are today, but suddenly they are here and they're growing"*

# Arigatoo Gozaimasu

私の話を聞いてくれて。ありがとう

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