

## **ABSTRACT**

**Mgr Monika Zbozień**

This study is an attempt to examine whether the robotization of production can be associated with inequality increase. It is assumed that it would be possible provided that technology developments cause a decrease in labor share of national income on the one hand and lead to unequal changes in labor income distribution on the other. The main objective was to determine whether and how the robotization of production affected labor share of national income for selected European countries between 2005 and 2019.

The relationship between the robotization of production and the distribution of national income is analyzed from the perspective of work. The main focus is on how it has changed in recent years, what factors influenced it, and finally - whether it can be assumed that the development of robotization was one of them. The impact of robotization of production is therefore examined in the context of other factors that may influence labor share in national income (as well as the breakdown of labor income by earnings), such as changes in employment, equipment prices, unionization or exposure to import.

Preliminary analyzes identified differences between countries in the density of industrial robots in production, as well as characteristics that are the potential reasons of the differences. In addition, it was determined what is the size of labor share in national income for selected countries and how it was shaped. These findings were later used to prepare panel models to verify if there is a significant relationship between the labor share of national income and the density of industrial robots.