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Exploring Pension Systems in the Face of Risks Arising from Digitalization, Robotization, and Artificial Intelligence: A Literature Review*

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Abstract

The 21st century is the era of the Fourth Industrial Revolution, characterized by rapid technological progress driven primarily by digitalization, robotization, and artificial intelligence. These processes are increasingly affecting businesses, consumers, and public institutions. The purpose of this article is to present the current state of knowledge regarding the key challenges arising from the implementation of the aforementioned technologies, particularly in relation to the management of modern pension systems. On the one hand, technological changes create new opportunities, potentially improving the functioning of pension security. On the other hand, these same changes bring significant risks that either did not exist before or were of relatively minor importance. The study is based on a review of current academic and specialist publications as well as analytical reports covering the issues of digitalization, robotics, and artificial intelligence, particularly in the context of the functioning of modern pension systems.

Keywords: automation, artificial intelligence (AI), digitalization, robotization, pension systems risks.