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## Human Right to Work and Humanlike AI at Work: Technological Unemployment as a Legal and Ethical Issue

*Prawo człowieka do pracy i sztuczna inteligencja o cechach ludzkich w miejscu pracy. Bezrobocie technologiczne jako kwestia prawa i etyczna*

### ABSTRACT

The article considers various scenarios that are materializing following the emergence of a humanlike AI. In particular, the author argues that technological unemployment (and involuntary unemployment in general) should not be seen only as a technical issue belonging to economic discourse. Technological unemployment should also be seen as an ethical and legal issue, as a theory that entrusts the allocation of resources and jobs to the law of supply and demand alone is clearly in contrast with the Universal Declaration of Human Rights and various constitutional charts and ordinary laws. These pieces of legislation establish that work is not just an opportunity to be seized by competent people, but a fundamental human right.

**Keywords:** artificial intelligence; unemployment; economic theories; Universal Declaration of Human Rights; inequalities

### INTRODUCTION

Economists have identified different types of unemployment and multiple factors that can produce this phenomenon. Unemployment has been qualified as struc-

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tural, frictional, cyclical, technological, voluntary, involuntary, classical, hidden, long-term, short-term, natural, pathological, mass, youth, elder, etc.<sup>1</sup> As one can see, the expressions qualifying unemployment may refer to the type, the cause, the duration, the affected category, or the magnitude. Schools of economic thought, such as the classical, neoclassical, Keynesian, or Marxist, understand and conceptualize this phenomenon differently.

It is worth noticing that, due to their theoretical meaning, some of these denominations are reciprocally exclusive, while others point to different aspects of the phenomenon. On the one hand, unemployment can be structural as opposed to frictional, long-term as opposed to short-term, natural as opposed to pathological, youth as opposed to elder, etc. On the other hand, it can be simultaneously structural, technological, and long-term.

Among the expressions in use, one that includes a causal explanation is “technological unemployment”.<sup>2</sup> This term indicates an increase in the unemployment rate due to the appearance of new technologies, such as industrial machinery, computers, and robots, which make human labor obsolete. Technological development is certainly not the only cause of unemployment. The latter could be the outcome of other phenomena or processes, such as deindustrialization, non-flexible labor market, financial crises, inefficiencies of the education system, or – as we observed during the pandemic emergency – restrictions to individual freedom imposed by governments.

A wide range of theoretical positions concerning technological unemployment emerged during the various phases of the Industrial Revolution. Differences affect diagnosis, prognosis, and therapy. One can indeed observe a lack of consensus about the reality of technological unemployment, as well as the prospect of future unemployment or the remedies to the problem. As regards the diagnosis, a sharp polarization can be observed. Scholars belonging to the classical and neoclassical schools in economics, or those who generally see the free market as the most natural and efficient way to organize the economy, tend to deny the occurrence of unemployment as a consequence of technolog-

<sup>1</sup> See E. McLaughlin, *Understanding Unemployment: New Perspectives on Active Labour Market Policies*, London–New York 2002; J.S. Mlakar (ed.), *Unemployment: A Closer Look*, New York 2011; M. Giugni, J. Lorenzini, M. Cinalli, C. Lahusen, S. Baglioni, *Young People and Long-Term Unemployment: Personal, Social, and Political Effects*, London–New York 2021; C. Lahusen, M. Giugni (ed.), *Experiencing Long-Term Unemployment in Europe: Youth on the Edge*, London 2016.

<sup>2</sup> See G.R. Woirol, *The Technological Unemployment and Structural Unemployment Debates*, Westport 1996; A.S. Bix, *Inventing Ourselves Out of Jobs? America's Debate Over Technological Unemployment, 1929–1981*, Baltimore 2002; R. Campa, *Still Think Robots Can't Do Your Job? Essays on Automation and Technological Unemployment*, Rome 2018; M.A. Peters, P. Jandrić, A.J. Means (eds.), *Education and Technological Unemployment*, Singapore 2019.

ical development.<sup>3</sup> In their view, new technologies do not destroy jobs. They only produce job displacement. In other words, new technologies change the job composition of the economy, e.g., by forcing workers to move from the agricultural to the industrial sector or from industry to services, while the overall unemployment rate does not vary significantly. If the unemployment rate grows, these economists blame the lack of flexibility in the job market as the ultimate cause. For these reasons, they dismiss the concept of technological unemployment itself as a fallacy (namely the “Luddite fallacy”). Even after the appearance of artificial intelligence, there is no lack of economists denying the reality of technological unemployment and focusing on labor displacement. It should be, however, noticed that they currently base their analysis on more sophisticated arguments than the conventional neoclassical setting featuring balanced growth.<sup>4</sup> These scholars accurately study the past and the present, observe no massive unemployment produced by new technologies, and conclude that we should not expect something different in the future. In case of job losses due to other causes, they assume that the best therapy is keeping the job market sufficiently free of artificial restraints, as compensation mechanisms will prevent the emergence and sedimentation of unemployment.

Scholars rejecting this narrative belong to different schools of thought. Notable exceptions inside the classical and neoclassical schools of political economy itself were not lacking. Suffice it to mention dissenters such as J. Steuart and D. Ricardo.<sup>5</sup> Economists with a Marxian or Marxist orientation traditionally consider technological unemployment as a critical phenomenon that can lead to societal disaster and radical social change.<sup>6</sup> Keynesians also take this phenomenon quite seriously but without despair. Technological unemployment is real, but the disease

<sup>3</sup> See A. Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, London 1998 (original version 1776); J.A. Schumpeter, *History of Economic Analysis*, London 2006 (original version 1954); K. Wicksell, *Lectures on Political Economy*, London 1977.

<sup>4</sup> D.H. Autor, *Why Are There Still So Many Jobs? The History and Future of Workplace Automation*, “Journal of Economic Perspectives” 2015, vol. 29(3), pp. 3–30; D. Acemoglu, P. Restrepo, *Artificial Intelligence, Automation and Work*, “NBER Working Paper” 2018, no. 24196; D. Autor, A. Salomon, *Is Automation Labor-Displacing? Productivity Growth, Employment, and the Labor Share*, 27.2.2018, [https://www.brookings.edu/wp-content/uploads/2018/03/1\\_utorsalomons.pdf](https://www.brookings.edu/wp-content/uploads/2018/03/1_utorsalomons.pdf) (access: 11.10.2025).

<sup>5</sup> J. Steuart, *An Inquiry into the Principles of Political Economy*, London 1767; D. Ricardo, *On the Principles of Political Economy and Taxation*, Kitchener 2004 (original version 1821).

<sup>6</sup> K. Marx, *Capital: A Critique of Political Economy*, Harmondsworth 1976 (original version 1867); F. Engels, *Preface to the English Edition*, [in:] K. Marx, *Capital: A Critique of Political Economy*, Book One: *The Process of Production of Capital*, London 1887; P.H. Douglas, *Are We Suffering from Technological Unemployment?*, “Labor Bulletin. Illinois Department of Labor” 1928, vol. 7, pp. 135–136; J. Kuczynski, *Technological Unemployment*, [in:] *Trade Unions Study Unemployment*, Washington 1929.

is only a temporary phase of maladjustment. Not surprisingly, the most famous definition of technological unemployment was provided by J.M. Keynes, namely, “unemployment due to our discovery of means of economising the use of labour outrunning the pace at which we can find new uses for labour”. Keynes also codified the concept of “involuntary unemployment”, which, after a moment of popularity, remained in the shadows for a long time.<sup>7</sup> Economists of the Keynesian persuasion keep raising concerns about the growth of unemployment and the prospect of mass unemployment.<sup>8</sup>

Finally, futurists and engineers of different political persuasions have recently revived the alarming prospect of mass unemployment due to technological development.<sup>9</sup> In their view, the Luddite fallacy argument rests on two invalid assumptions. The first is that machines are mere tools to increase productivity. The second is that the majority of workers are capable of becoming machine operators. According to these scholars, machines have the potential to become smart enough to act as autonomous workers. Technological development may lead to “the end of work” if capital turns into labor. They do not contest the studies produced by mainstream economists about the past, but they emphasize that artificial intelligence and current robotics are something radically new. Current machines are *humanlike*; therefore, we cannot simply assume that compensation mechanisms that worked well in the past will still efficiently work in the future.

Concerning therapies, we also encounter different positions. Marxists notoriously propose the socialization of the means of production. According to Keynesians, even if there is no free market mechanism at work that can automatically cope with unemployment (no *invisible hand*), the problem can and will be handled with opportune *public policies*, such as the government’s industrial plans, redistribution of wealth through taxation, retraining of workers, and a significant reduction of working hours. Finally, according to many futurists and engineers, the new scenario requires a more radical solution than the traditional Keynesian policies, such as a universal basic income.

<sup>7</sup> J.M. Keynes, *The General Theory of Employment, Interest and Money*, London 1936; M. De Vroey, *Involuntary Unemployment: The Elusive Quest for a Theory*, London–New York 2004.

<sup>8</sup> P. Krugman, *Sympathy for the Luddites*, “New York Times”, 13.6.2013; J. Schor, *Why Solving Climate Change Requires Working Less*, [in:] *Time on Our Side: Why We All Need a Shorter Working Week*, eds. A. Coote, J. Franklin, London 2013; C.B. Frey, M.A. Osborne, *The Future of Employment: How Susceptible Are Jobs to Computerization*, “Technological Forecasting & Social Change” 2017, vol. 114, pp. 254–280.

<sup>9</sup> E. Brynjolfsson, A. McAfee, *Race Against the Machine: How the Digital Revolution Is Accelerating Innovation, Driving Productivity, and Irreversibly Transforming Employment and the Economy*, Lexington 2011; eidem, *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*, New York 2014; J. Hughes (ed.), *Technological Unemployment and the Basic Income Guarantee*, “Journal of Evolution and Technology” 2014, vol. 24(1); M. Ford, *Rise of the Robots: Technology and the Threat of a Jobless Future*, New York 2015.

## TECHNOLOGICAL UNEMPLOYMENT AS AN ECONOMIC ISSUE

Sociologist R.K. Merton warned that “before one proceeds to explain or to interpret a phenomenon, it is advisable to establish that the phenomenon actually exists”.<sup>10</sup> Neoclassical theory is currently the dominant paradigm in academia and business, while Marxist and Keynesian economic theories are considered outdated in many academic circles. Therefore, before arguing that technological unemployment is a legal and ethical issue, I feel the necessity to produce more substantive arguments in favor of the reality of technological unemployment, also bringing a sociological perspective into play.

To start, it is worth noting that mainstream media cover some narratives more than others, as they are more functional to the interests of their institutional owners. In 2018, a report by the World Economic Forum (WEF) ruled out the possibility of mass unemployment due to technological development, reiterating the dogma of neoclassical theory. In the report, one reads: “One set of estimates indicates that 75 million jobs may be displaced by a shift in the division of labor between humans and machines, while 133 million new roles may emerge”.<sup>11</sup> This formula has been repeated as a mantra in the last few years whenever someone raises the problem of technological unemployment. Consequently, one may assume that experts solved the case once and for all. Still, it is not difficult to demonstrate that this assumption is misleading.

Firstly, discussions around technological unemployment are still commonplace in academia. By watching the growing number of publications dealing with this subject, one may conclude that current dissenters are not isolated cases. Technological unemployment is still an economic issue for many and, perhaps, the majority of scholars. I will not elaborate more on this aspect, as I have already produced and published several meta-analytic studies showing the growing concern for technological unemployment in the 21<sup>st</sup> century.<sup>12</sup>

Secondly, the WEF published its report before the release of OpenAI’s ChatGPT. Anyone who has tested ChatGPT models above 3.5 is well aware that the latest

<sup>10</sup> R.K. Merton, *Three Fragments from a Sociologist’s Notebooks: Establishing the Phenomenon, Specified Ignorance, and Strategic Research Materials*, “Annual Review of Sociology” 1987, vol. 13, p. 2.

<sup>11</sup> World Economic Forum, *The Future of Jobs Report 2018*, Geneva 2018, p. viii.

<sup>12</sup> R. Campa, *Technological Unemployment: A Brief History of an Idea*, “Orbis Idearum. European Journal of the History of Ideas” 2018, vol. 6(2), pp. 57–80; idem, *Three Scenarios of the Future of Work: Technological Unemployment, Compensation, Hollowing Out*, “Sociology and Technoscience” 2019, vol. 9(2), pp. 140–154; idem, *Technological Unemployment and Universal Basic Income: A Scientometric Analysis*, “Sociologies in Dialogue” 2019, vol. 5(1), pp. 57–85; idem, *Fourth Industrial Revolution and Emotional Intelligence: A Conceptual and Scientometric Analysis*, “Changing Societies & Personalities” 2020, vol. 4(1), pp. 8–30.

generation of artificial intelligence, even if not “conscious” by one definition or the other of this term, is much more “intelligent” than the average human being. It disposes of more information, speaks better, and is faster and more precise. True, sometimes the AI makes mistakes, but have human workers and managers ever made mistakes? AI does not get sick or impatient, does not have nervous breakdowns nor go on vacation, does not have to eat nor sleep, but, above all, it continues to improve minute by minute. Therefore, it is not surprising that some companies either are on stand-by and hesitate to recruit more personnel or have started firing employees. Concerns regarding the possible repercussions of generative AI on employment levels cannot be rejected as unfounded or irrelevant, as the creators of these technologies themselves raise them. Among others, the CEO of OpenAI, S. Altman, is of this persuasion.<sup>13</sup>

Thirdly, distinguishing aspects such as the magnitude and cause of job losses is of fundamental importance. Too often, one assumes that technological unemployment is either massive or is not. The same applies to the duration of the unemployment condition, which is an aspect distinct from the cause. That general employment levels after the emergence of new technology did not change significantly is no evidence that the emergence of new technologies is not the cause of a certain amount of unemployment. Let us illustrate this statement with a couple of examples.

CNN journalist A. Cooban reported that the chief executive of Dukaan, a Bangalore-based startup, “laid off 90% of his support staff after the firm built a chatbot powered by artificial intelligence that (...) can handle customer queries much faster than his employees”.<sup>14</sup> One of the firm’s data scientists built the chatbot in only two days. The chatbot’s performance surpasses that of human employees. It responds to initial customer queries instantly. The staff responded, instead, after an average of 1 minute and 44 seconds. As a result, “by introducing the technology, the company has cut the cost of its customer support function by about 85%”. Dukaan is a small e-commerce company, and layoffs were only twenty-three.

Still, this is not an isolated case. “Fortune” informs us that, in the USA, thousands of workers have recently lost their jobs to AI. More in detail, since May 2023, “US companies have announced more than 4,600 jobs cuts in order to free up resources to hire people with AI experience or because the technology replaced tasks, according to outplacement firm Challenger, Gray & Christmas Inc.”.<sup>15</sup> Senior Vice President A. Challenger said in an interview that the estimate is “certainly

<sup>13</sup> F. Landymore, *Sam Altman Warns That AI Is Gonna Destroy a Lot of People’s Jobs*, 19.10.2023, <https://futurism.com/the-byte/sam-altman-warns-ai-destroy-jobs> (access: 17.10.2025).

<sup>14</sup> A. Cooban, *This CEO Replaced 90% of Support Staff with an AI Chatbot*, 12.7.2023, <https://edition.cnn.com/2023/07/12/business/dukaan-ceo-layoffs-ai-chatbot> (access: 17.10.2025).

<sup>15</sup> J. Constantz, Bloomberg, *Over 4,000 Workers Have Lost Their Jobs to AI since May, Outplacement Firm Estimates – and That’s ‘Certainly Undercounting’*, 8.2.2024, <https://fortune.com/2024/02/08/how-many-workers-laid-off-because-of-ai> (access: 17.10.2025).

undercounting” the true total. “Fortune” also reports that BlackRock Inc., in January 2024, said it would dismiss about 600 employees. President R. Kapito and CEO L. Fink, in a memo to staff, talked of dramatic shifts, as “new technologies are poised to transform our industry – and every other industry”.

Another company replacing people with generative AI is SAP, one of Europe’s most valuable enterprises. SAP declared that it will invest €2 billion this year on the change, which will include buyouts and retraining initiatives. By restructuring 8,000 employees, which is 7% of its workforce, the massive enterprise software company is joining an increasing number of businesses turning their attention to artificial intelligence. Other notable cases are Wipro and Alibaba.<sup>16</sup> These are just some of the many examples reported by the media at the beginning of 2024.

These numbers tell us nothing about the general trend or the stability of the economic systems as a whole. However, they are significant to make our point. Even though unemployment in 2024 does not grow as much as expected, the fact remains that, while I’m writing, thousands of workers are losing their jobs due to artificial intelligence. We must distinguish between jobs and people. Numbers saying that the overall unemployment rate has grown little or nothing do not inform us about the fate of these specific workers. Do these individuals appear in the total number of employed people? Or are new generations of young people or perhaps immigrants who shore up the statistics? It takes sociological sensitivity to see that the transition process is painful. Experience from the past shows that part of the unemployed people find a new job only after a long time of existential struggle. They go through a period of harsh difficulty that statistics do not mention at all. Besides, another larger or smaller percentage of workers remains permanently jobless. Some of them sink into a state of depression, others begin to abuse alcohol and narcotic substances, and others get involved in criminal activities. According to statistics, they are no longer unemployed precisely because they have stopped actively looking for work, are sick, or are in jail. When new job opportunities appear, it is too late for these people to catch them, as employers prefer to recruit fresh forces. This phenomenon is known as “lost generation”.<sup>17</sup> Let us not forget that in the USA, 2.3 million individuals are in jail, and this number keeps growing. Besides, every year, an average of 2.5 million people legally immigrate to the USA, while the number of illegal immigrants is unknown. If one does not confuse

<sup>16</sup> M. Toh, *SAP Is Restructuring 8,000 Jobs as It Shifts Focus to AI*, 24.1.2024, <https://edition.cnn.com/2024/01/24/tech/sap-restructuring-ai-jobs-intl-hnk> (access: 17.10.2025).

<sup>17</sup> M.C. Brinton, *Social Class and Economic Life Chances in Post-Industrial Japan: The “Lost Generation”*, [in:] *Social Class in Contemporary Japan: Structures, Sorting and Strategies*, eds. H. Ishida, D.H. Slater, London 2009, p. 163; eadem, *Lost in Transition: Youth, Work, and Instability in Postindustrial Japan*, Cambridge 2011; M. Allen, P. Ainley, *Lost Generation? New Strategies for Youth and Education*, London–New York 2010.

jobs with persons, one realizes that the phenomenon of workers losing their jobs to technology is a real one.

The issue of technological unemployment seems of particular significance, especially for what we would call High Robot Density Societies (HRDS), that is societies (intended as countries or national states) having a “robot density” constantly higher than the global average. Even if the situation is in continuous evolution, among HRDS we may currently list countries such as the Republic of Korea, Singapore, Germany, Japan, Sweden, Denmark, the United States, Italy, Belgium, Taiwan, Spain, the Netherlands, Canada, Austria, Finland, Slovenia, Slovakia, France, Switzerland, the Czech Republic, and Australia. Statistical data about robot density are available on the web and in paper publications of the International Federation of Robotics.<sup>18</sup> However, shortly, the issue of technological unemployment could also become significant for other countries that are rapidly growing. For instance, Poland is an interesting case because its robot density, even if currently lower than average, over the last decade has increased significantly.

To sum up, many scholars believe that technological unemployment is an actual issue. Their claims are of three types: descriptive, predictive, and normative. In other words, they tell us what happened (or is happening), what could happen in the future, and what one should do for a preferred state of affairs to occur in the future. Classical and neoclassical dissenters, Marxist activists, Keynesian economists, futurists, and engineers discuss technological unemployment as an actual or potential phenomenon. My main point is that this phenomenon also has legal and moral dimensions deserving attention. In other words, I believe it is appropriate to raise the problem of technological unemployment not only as an economic phenomenon but also as a legal and ethical issue.

## TECHNOLOGICAL UNEMPLOYMENT AS A LEGAL ISSUE

As obvious as it may seem, it is worth reminding that the legal and moral realms are not perfectly overlapping. Many behaviors are generally considered both immoral and illegal. For instance, theft and murder are immoral behaviors so destructive to society that legislators in almost all countries in the world have also made them illegal, entrusting their punishment to institutions. On the contrary, low-intensity immorality did not receive much attention from the legislator. For instance, lying to a good friend or cheating on a partner is probably considered immoral by most, but, at least in Western countries, these actions do not fall within the realm of illegality. Their punishment is left to the victims and the close circle of

<sup>18</sup> International Federation of Robotics, *Robot Density Rises Globally*, Frankfurt 2018; International Federation of Robotics, *Executive Summary World Robotics 2018 Industrial Robots*, Frankfurt 2018.

mutual friends, who can isolate the liar or the cheater. However, some behaviors are considered illegal by the legislation and perfectly moral by one part of the social body, or vice versa. The best-known case is that of abortion. Where it is legal, a part of the population considers immoral the very law that allows it. Instead, where it is illegal, another part of the population judges immoral the very law prohibiting it.

Unemployment is among the controversial cases. There are laws requiring governments to find a solution to unemployment. In other words, the legislative power asks the executive power to guarantee full employment or, at least, access to social benefits for the temporarily unemployed. However, some economists and citizens believe that the allocation of economic resources (goods, capital, workforce, etc.) should be left to the laws of the market. They believe that markets have their intrinsic morality, one that public policies should not alter. Thus, they consider the direct intervention of governments in the catalectic game immoral, even when required by the law.

The imperative to prevent or combat involuntary unemployment is a principle grounded in important pieces of legislation. For instance, the 1948 Universal Declaration of Human Rights (UDHR) includes this principle. Paragraph 1 of Article 23 UDHR reads: "Everyone has the right to work, to free choice of employment, to just and favorable conditions of work and to protection against unemployment".

Thus, to work and be protected from unemployment is a fundamental human right, not just a possibility offered to individuals by the free market. Paragraph 1 of Article 25 UDHR specifies that everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.

As one can see, the right to work and security in the event of unemployment is not unconditioned. The lack of a job must depend on causes that are not within the control of the unemployed person. Technological unemployment meets the requirement because the worker or the unemployed are not in a position to control the design, construction, and use of industrial robots in factories or artificial intelligence in offices.

The UDHR is not, in itself, a legally binding instrument. Its implementation in national legislation is not mandatory. However, it cannot be ignored by those countries that have ratified it. Several countries have indeed included these principles in their fundamental or ordinary laws. Once they are incorporated into constitutions, they become legally binding. Let us give an example. Italy is a very significant case because its leaders were busy rewriting the Constitution just as the principles of the UDHR were being discussed. On 2 June 1946, a referendum took place to choose between monarchy and republic, and granted the victory to the latter. The new Constitution was approved by the Constituent Assembly on 22 December

1947, and promulgated by the provisional Head of State on 27 December 1947. One year later, Italy voted in favor of the UDHR. Several principles are present in both documents. Quite significantly, Article 1 of the Italian Constitution declares Italy to be “a democratic Republic founded on labour”. As Article 38 specifies, “Workers have the right to be assured adequate means for their needs and necessities in the case of accidents, illness, disability, old age and involuntary unemployment”.

However, from the promulgation of the Constitution to today, net of fluctuations, Italy generally has had one of the highest youth unemployment rates in the Western world.<sup>19</sup> Furthermore, it did not even have a safety net for young people who have never started working. For seventy years, only non-precarious workers who lost their jobs were protected. Only recently was a “citizenship income” introduced to protect the chronically unemployed, precarious workers, and the poor.<sup>20</sup> Citizenship income was subsequently reduced and denied to some social categories by the government in power at the time of writing. It means that constitutional provisions have not found execution in ordinary laws and social reality.

As I noted above, resistance comes from those who espouse a specific economic theory. When the UDHR and the Constitution of the Italian Republic came into force, neoclassical economics – which notoriously constitutes the theoretical backbone of free-market and neoliberal capitalism – was not the dominant paradigm. Marxism was the theoretical basis of the so-called socialist bloc and enjoyed support from opposition parties and movements in the Western world. Besides, after the 1929 crisis, many governing forces of the capitalist bloc looked more favorably on Keynesian theory than the neoclassical one. However, as is well known, laissez-faire economics has come back into fashion since the 1980s. Then, after the collapse of the communist bloc in 1989, within the framework of neoliberal globalism, started being considered as the only truly scientific theory. These circumstances explain why the “right to work”, although guaranteed by the legislation, has lost its moral strength, and the law remains a dead letter.

According to free-market advocates, the law of supply and demand determines (or should determine) the employment rate of a society. The main conditions for the employability of citizens are their competence and usefulness to the hiring company rather than a constitutional right. In their view, there is no such thing as involuntary unemployment. Unemployed citizens are either lazy or too demanding.

<sup>19</sup> T. Kieselbach (ed.), *Youth Unemployment and Social Exclusion: Comparison of Six European Countries*, Wiesbaden 2000; C. Lahusen, M. Giugni (eds.), *op. cit.*; M. Giugni, J. Lorenzini, M. Cinalli, C. Lahusen, S. Baglioni, *op. cit.*

<sup>20</sup> R. Lodigiani, F. Maino, *Minimum Income, Active Inclusion, and Work Requirements in Europe: Insights from Community Service Projects Introduced by Italian Citizenship Income*, “Stato e mercato. Rivista quadrimestrale” 2022, no. 3, pp. 369–406.

If they cannot find a job due to their incompetence, they have not taken the chance to learn something at school.

It is hardly deniable that there are lazy and incompetent people around, and private employers have no moral duty to employ whoever. Still, this perspective does not consider the effects of financial crises and structural problems generated by the emergence of new technologies. After the 2008 subprime crisis and the 2011 sovereign debt crisis, many US and EU citizens lost their jobs, but it is rather absurd to assume that they have all suddenly become lazy. Economist V.A. Beker sarcastically noted what follows: “So, it seems that the crisis was caused by a sudden and mysterious increase in the preference for leisure. American workers suddenly decided to stay at home and watch TV instead of going to work. Of course, you are forced to reach that conclusion if you start assuming that the recession is an equilibrium outcome for agents who maximize their utilities. We are now again in a pre-Keynesian world where unemployment is always a voluntary decision by workers who have an increased preference for leisure compared with work”.<sup>21</sup>

Not only is there disagreement over whether involuntary unemployment exists, but there is a lack of consensus about the necessity to contrast it. Mainstream economic theory openly maintains that full employment may have deleterious effects on economic balances. In 1975, F. Modigliani and L. Papademos introduced the concept of a non-inflationary unemployment rate, now known under the denomination of Non-Accelerating Inflation Rate of Unemployment (NAIRU).<sup>22</sup> It indicates the unemployment rate that keeps the level of inflation constant. A government aiming to keep inflation or labor costs under control would implement policies that could result in a rise in the unemployment rate.<sup>23</sup>

The case of the European Central Bank (ECB) is exemplary in this respect. Its second President, J.-C. Trichet, emphasized back in 2009, that the “Eurosyst-tem, comprising the ECB and the national central banks (NCBs) of the euro area countries, has a clear mandate assigned by the Treaty establishing the European Community: its primary objective is to maintain price stability in the euro area. In other words, the Governing Council of the ECB is mandated to preserve the purchasing power of the euro”.<sup>24</sup> A treaty is a legally binding agreement between nation-states. Therefore, under international law, the ECB’s inflation mandate is legally binding. Until the COVID-19 pandemic and the war in Ukraine broke out,

<sup>21</sup> V.A. Beker, *Rethinking Macroeconomics in the Light of the US Financial Crisis*, “Real-World Economics Review” 2012, vol. 60, pp. 105.

<sup>22</sup> F. Modigliani, L. Papademos, *Targets for Monetary Policy in the Coming Year*, “Brookings Papers on Economic Activity” 1975, no. 1.

<sup>23</sup> E. Stockhammer, *The Rise of Unemployment in Europe: A Keynesian Approach*, Cheltenham-Northampton 2004.

<sup>24</sup> Cited after D. Gerdesmeier, *Price Stability: Why Is It Important for You?*, Frankfurt am Main 2009.

the price stability sought by the ECB's monetary policy traditionally included a 2% inflation rate across all euro countries combined.

These policies may satisfy the needs of bankers, entrepreneurs, savers, and consumers, in the conviction that the economy works better when prices are stable. However, this approach conflicts with the legal and moral principles established by the UDHR and some constitutions. This mandate also contrasts with the proclamations of politicians, both right-wing and left-wing, who during election campaigns invariably promise that their government will guarantee both full employment and price stability. In the current economic system, this is impossible. Showing that there are countries in the European Union that have a low unemployment rate (e.g. the Netherlands and Germany) proves nothing because the discourse regards the whole area using the same currency. If price stability concerns the entire eurozone, there must be other countries that pay the bill in terms of unemployment. Usually, these are the so-called PIGS (Portugal, Italy, Greece, and Spain). As an English proverb says, you can't have your cake and eat it too.

## TECHNOLOGICAL UNEMPLOYMENT AS AN ETHICAL ISSUE

As we have seen, the debate on technological unemployment tends to be structured around two extreme positions. Some experts say that we are moving towards a jobless society and approaching a sort of apocalypse (sometimes called a “robocalypse”). Other experts say we should not expect anything new under the sun, as new professions will replace those disappearing. The point I am making here is that technological unemployment must be treated as an ethical problem even when it affects a limited portion of the workforce for a limited period (if not cushioned by appropriate social policies).

My main arguments are two. The first concerns involuntary unemployment, while the second, more specifically, technological unemployment. Firstly, involuntary unemployment is morally unacceptable because most human beings coming into existence in this world today are no longer in the condition of our ancestors. As J.-J. Rousseau also noted in *The Social Contract*, before civilization, humans could appropriate whatever was within the reach of their strength and intelligence to ensure their survival.<sup>25</sup> Once public and private ownership of goods has been introduced, together with its protection by the law, almost all goods have become inaccessible or difficult to access for newborn humans. People alive today cannot simply build a house wherever they want, cultivate land that does not belong to them, or even fish and hunt without authorization. After their birth, most humans

<sup>25</sup> J.-J. Rousseau, *Discourse on Political Economy and The Social Contract*, Oxford 1999.

find everything in control or possession of someone else, hence the invitation to governments to ensure every human being finds work or sustenance.

Secondly, all workers contribute to technical-scientific progress. Taxpayers finance with their money schools, universities, and public research centers. Private research takes indirect advantages from public education. Therefore, if a consistent percentage of workers lose their jobs due to technological improvements they helped to achieve, their job loss is profoundly unjust. Everyone who contributed directly or indirectly to technological development should benefit from it. It is a matter of social justice. As justice is an ethical concept, the issue of technological unemployment belongs to ethics, besides economics.

If these principles, as well as those incorporated in the UDHR and some constitutional laws, may sound utopian, there is still space for compromise. Let us admit that a grain of truth is in both narratives – pro-free market and pro-government intervention. In other words, let us admit that, among the involuntarily unemployed, some deserve their condition because they have done nothing to be attractive for the job market, while others do not deserve it because they are victims of events beyond their control. If this is the case, one could establish an ethical threshold for the unemployment rate. It is also worth considering that the technical and moral discourses are already inextricably linked in economic theories. Arguing that the unemployed are actually lazy or too demanding is a moral judgment, in the same way as saying that every human being, as such, has the right to have a decently paid job. If the truth lies in the middle, it is worth asking what is the morally acceptable unemployment rate.

An interesting proposal in this sense came from economist J.K. Galbraith, who examined the link between the unemployment rate and inequalities. Linking the estimates of wage dispersion from separate data sets going back to 1920, Galbraith found that unemployment accounts for some 55% of the variation in inequality over 72 years of data. Using a method similar to that used to calculate the NAIRU, he determined the rate of unemployment below which inequality declines and above which it rises. He called it “the ethical rate of unemployment” and estimated it quite stably to be 5.5%. This means that any higher level of unemployment is inherently immoral. Quite interestingly, NAIRU is also around this percentage, so this proposal appears to be a good compromise between the interests of entrepreneurs and bankers, on the one hand, and workers and unemployed, on the other.<sup>26</sup> Still, it should be considered that Galbraith published his article in 1998, and the situation has considerably worsened in terms of inequality in the years that separate us from that publication. One should recalculate the ethical rate of unemployment, taking into account data from the last 25 years.

<sup>26</sup> J.K. Galbraith, *The Ethical Rate of Unemployment: A Technical Note*, “Journal of Economic Issues” 1998, vol. 32(2), pp. 531–537.

This proposal starts from the principle that inequality itself is unethical. Even assuming that human beings are not equal from the point of view of abilities and morality, the level of inequality produced by the capitalistic system does not reflect the real differences between them. The *catalectic game* is structured in such a way as to ensure that some have much more and others much less than they deserve, given their abilities and willingness. Simply put, capitalism tends to produce the so-called St. Matthew effect, which takes its name from the gospel verse: “For to everyone who has will more be given, and he will have abundance; but from him who has not, even what he has will be taken away” (Matthew 25:29, RSV).

## UNEMPLOYMENT, INEQUALITY AND UNIVERSAL BASIC INCOME

Whenever the specter of mass technological unemployment is raised, the more often proposed solution is universal basic income. I will provide just an example among the recent ones. E. Musk met the Prime Minister of the United Kingdom, R. Sunak, on 2 November 2023, for a conversation on artificial intelligence. The American entrepreneur said he envisions a future where “no job is needed” and predicted that AI has the potential to “create a future of abundance”.<sup>27</sup> In his view, governments should step in to act as referees and provide not simply a basic income but rather a “universal high income”. He added: “You can have a job if you want to have a job... but the AI will be able to do everything. I don’t know if that makes people comfortable or uncomfortable”. According to T. Bristow and D. Bloom, this statement provoked nervous laughter from Sunak.<sup>28</sup> Perhaps the British prime minister did not predict that the richest man in the world, rather than defending global neoliberalism, would envision a utopian future where AI will act as a leveler and the global wealth will be distributed more equally by nation-states.

The average person is usually disoriented when hearing such words. Commoners spend their lives working and, one day, learn that what they do is not strictly necessary. This astonishment is the result of three incorrect assumptions. The first is that everyone must work to live. The second is that economic inequalities are not particularly large. The third is that citizens serve the system first and foremost as workers.

<sup>27</sup> J. Korn, *Elon Musk Sees an AI Future Where ‘No Job Is Needed’*, 3.11.2023, <https://edition.cnn.com/2023/11/02/tech/elon-musk-conversation-british-prime-minister-rishi-sunak-artificial-intelligence/> (access: 17.10.2025).

<sup>28</sup> T. Bristow, D. Bloom, *Elon Musk Hails Rishi Sunak’s ‘Essential’ Decision to Invite China to UK AI Summit*, 2.11.2023, <https://www.politico.eu/article/elon-musk-hails-rishi-sunaks-essential-decision-to-invite-china-to-uk-ai-summit/> (access: 17.10.2025).

The situation is different. Firstly, as a large portion of citizens have to work to live, a portion of citizens also exist who live on an income from what was accumulated by their parents or ancestors. Therefore, it is a matter of understanding that the workers replaced by machines can, in principle, become part of the class that lives on income. This process can develop to a point where the class having to work for a living disappears completely. This scenario can also materialize within a capitalistic economy, as L. Kelso and M. Adler explain in their *Capitalist Manifesto*.<sup>29</sup>

Secondly, in some capitalistic countries, economic and social inequalities are much more pronounced than one is ready to admit. For example, this is the case in the United States. Among the many studies on inequalities that were published, one by M.I. Norton and D. Ariely seems particularly significant because it addresses the issue of wealth distribution from both a psychological and an economic point of view.<sup>30</sup> The authors compare real inequalities with those perceived and those considered fair from an ethical point of view by the respondents. For this reason, although their study was published more than ten years ago, it fits particularly well into our discussion. As the authors specified, "wealth, also known as net worth, is defined as the total value of everything someone owns minus any debt that he or she owes". The population of the United States, which at the time of the research amounted to approximately 300 million, was divided into five quintiles: top 20%, second 20%, middle 20%, fourth 20%, and bottom 20%. The respondents were asked to indicate what percent of wealth they thought was owned by each of the five quintiles and, then, what percent each quintile should ideally hold. The sample of respondents who completed the survey amounted to 5,522 individuals. To put it briefly, no one dreamt of a perfectly equal distribution of wealth. After all, not even K. Marx indicated perfect equality as an ideal of communism. Contrary to what many people believe, Marx considered the ideal of an equal wage for all workers to be crass. The ideal distribution of wealth indicated by the respondents, regardless of whether they were right-wing or left-wing, female or male, young or old, approached that of Sweden. The most striking result was, however, that almost none of the respondents knew that, in the United States, the top 20% owned 84% of the wealth, the second quintile 11%, the middle quintile 4%, while the fourth and the bottom quintiles were not even visible in the graph, as they respectively owned only the 0.2 and 0.1% of the total wealth. It means that the poorest half of the population (circa 150 million citizens) owned less than 1% of the wealth, and 80% of the Americans owned only 16% of the net worth. Furthermore, the top 1% of American society owned 50% of the wealth. After the latest traumatic events of the 2008 subprime mortgage crisis, the 2011 European debt crisis, the pandemic,

<sup>29</sup> L.O. Kelso, M.J. Adler, *The Capitalist Manifesto*, New York 1958.

<sup>30</sup> M.I. Norton, D. Ariely, *Building a Better America – One Wealth Quintile at a Time*, "Perspectives on Psychological Science" 2011, vol. 6(1), pp. 9–12.

and the wars in Ukraine and Palestine, which have left visible scars on Western economies, the situation has further worsened from the point of view of inequalities. Crisis after crisis, net of fluctuations, money continued to flow from the pockets of the poorest into the pockets of the most affluent, making the top 1% and the top 0.1% much richer. In light of these data, what Musk says is anything but nonsense. Today, the American population is approximately 340 million. Income and wealth are two different concepts, but they are related as low-income workers can hardly accumulate wealth. If we imagine that, due to developments in robotics and artificial intelligence, 300 million Americans were suddenly left without sources of income, maintaining their level of wealth would cost relatively little when compared to the amount of overall wealth in the United States.

Thirdly, the function of citizens is not only to produce but also to consume and live in peace with others. As we saw, Musk said that governments should not provide a universal basic income but a universal high income to lay the foundations for an era of abundance.<sup>31</sup> This invitation is not pure philanthropy. To maintain the level of consumption sufficiently high is a way to avoid the collapse of the entire socioeconomic system. Indeed, when it comes to therapies, one should consider that what is rational at the microeconomic level is not necessarily rational at the macroeconomic level. Entrepreneurs replace workers with computers and robots as soon as they can, thus increasing productivity and competitiveness. The logic is flawless at the micro level of the company, but it generates a problem at the macro level of society, which in turn reverberates at the micro level. If every company does the same, not only the class of workers will evaporate, but also that of customers, as the former are the latter. Unless an economy produces mainly for export, citizens must be guaranteed sufficient income to fuel consumption. Another reason to provide a dignified life for citizens is that poverty can trigger immoral or illegal behavior that puts public safety and order at risk. We, therefore, always return to the same point, namely that, although conceptually distinct, the realms of ethics and economics are closely interconnected.<sup>32</sup>

## CONCLUSIONS

The main conclusions we can draw from this analysis are as follows.

Even if bankers and entrepreneurs may be interested in avoiding full employment, as it could increase the cost of labor and the inflation rate, almost nobody considers mass unemployment a desirable scenario. There is virtually no political party or social movement publicly affirming the desirability of a high unemploy-

<sup>31</sup> J. Korn, *op. cit.*; T. Bristow, D. Bloom, *op. cit.*

<sup>32</sup> L.O. Kelso, M.J. Adler, *op. cit.*; M.I. Norton, D. Ariely, *op. cit.*, pp. 9–12.

ment rate. Divergences among politicians or social scientists concern only the understanding of the causes of unemployment and, consequently, the ways of solving the problem.

Following the release of ChatGPT and similar generative AI systems, many companies started reducing their personnel.<sup>33</sup> Each technological revolution has eliminated countless jobs while creating new professions and job opportunities. However, a growing number of experts fear that the emergence of a humanlike AI could represent the ultimate revolution; one that would destroy jobs without creating new ones, or at least not enough to maintain a sustainable level of unemployment. A sudden and massive job loss may trigger social disruption and political chaos.<sup>34</sup>

According to mainstream economic theory, the employment rate of a society is (or should be) mainly determined by the law of supply and demand.<sup>35</sup> The competence and usefulness of citizens are the conditions for their employability. In contrast to this view, I argued that unemployment should be treated as an ethical and legal issue, especially if produced by technological development. Article 23 UDHR establishes that everyone has the right to work. The fundamental or ordinary laws of various countries maintain similar principles. Economist J.K. Galbraith developed the concept of the “ethical rate of unemployment”, a threshold above which inequality tends to rise and below which inequality tends to decline.<sup>36</sup>

If technological unemployment is a real phenomenon, regulatory intervention on a systemic level is needed. The government’s intervention in the economy is often seen as a “sin” by mainstream economic theory, as it assumes that markets instantly and perfectly self-regulate, while any intervention produces unwanted side effects in the short or long term.<sup>37</sup> However, given that workers are also consumers and entrepreneurs cannot be forced to hire workers they do not need, the only way to prevent the system from collapsing is to create new public jobs in a new financial frame that does not bust public debt, or establish a universal basic income. Both these solutions require radical intervention from the top.

<sup>33</sup> A. Cooban, *op. cit.*; J. Constantz, Bloomberg, *op. cit.*; M. Toh, *op. cit.*

<sup>34</sup> E. Brynjolfsson, A. McAfee, *Race Against the Machine...*; eidem, *The Second Machine Age...*; M. Ford, *op. cit.*; J. Hughes (ed.), *op. cit.*

<sup>35</sup> A. Smith, *op. cit.*; J.A. Schumpeter, *op. cit.*; K. Wicksell, *op. cit.*

<sup>36</sup> J.K. Galbraith, *op. cit.*

<sup>37</sup> *Ibidem.*

## REFERENCES

## Literature

Acemoglu D., Restrepo P., *Artificial Intelligence, Automation and Work*, “NBER Working Paper” 2018, no. 24196, DOI: <https://doi.org/10.3386/w24196>.

Allen M., Ainley P., *Lost Generation? New Strategies for Youth and Education*, London–New York 2010.

Autor D.H., *Why Are There Still So Many Jobs? The History and Future of Workplace Automation*, “Journal of Economic Perspectives” 2015, vol. 29(3), DOI: <https://doi.org/10.1257/jep.29.3.3>.

Beker V.A., *Rethinking Macroeconomics in the Light of the US Financial Crisis*, “Real-World Economics Review” 2012, vol. 60.

Bix A.S., *Inventing Ourselves Out of Jobs? America’s Debate Over Technological Unemployment, 1929–1981*, Baltimore 2002.

Brinton M.C., *Lost in Transition: Youth, Work, and Instability in Postindustrial Japan*, Cambridge 2011.

Brinton M.C., *Social Class and Economic Life Chances in Post-Industrial Japan: The “Lost Generation”*, [in:] *Social Class in Contemporary Japan: Structures, Sorting and Strategies*, eds. H. Ishida, D.H. Slater, London 2009.

Brynjolfsson E., McAfee A., *Race Against the Machine: How the Digital Revolution Is Accelerating Innovation, Driving Productivity, and Irreversibly Transforming Employment and the Economy*, Lexington 2011.

Brynjolfsson E., McAfee A., *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*, New York 2014.

Campa R., *Fourth Industrial Revolution and Emotional Intelligence: A Conceptual and Scientometric Analysis*, “Changing Societies & Personalities” 2020, vol. 4(1), DOI: <https://doi.org/10.15826/esp.2020.4.1.087>.

Campa R., *Still Think Robots Can’t Do Your Job? Essays on Automation and Technological Unemployment*, Rome 2018.

Campa R., *Technological Unemployment: A Brief History of an Idea*, “Orbis Idearum. European Journal of the History of Ideas” 2018, vol. 6(2).

Campa R., *Technological Unemployment and Universal Basic Income: A Scientometric Analysis*, “Sociologies in Dialogue” 2019, vol. 5(1).

Campa R., *Three Scenarios of the Future of Work: Technological Unemployment, Compensation, Hollowing Out*, “Sociology and Technoscience” 2019, vol. 9(2), DOI: <https://doi.org/10.24197/st.2.2019.140-154>.

De Vroey M., *Involuntary Unemployment: The Elusive Quest for a Theory*, London–New York 2004, DOI: <https://doi.org/10.4324/9780203645505>.

Douglas P.H., *Are We Suffering from Technological Unemployment?*, “Labor Bulletin. Illinois Department of Labor” 1928, vol. 7.

Engels F., *Preface to the English Edition*, [in:] K. Marx, *Capital: A Critique of Political Economy*, Book One: *The Process of Production of Capital*, London 1887.

Ford M., *Rise of the Robots: Technology and the Threat of a Jobless Future*, New York 2015.

Frey C.B., Osborne M.A., *The Future of Employment: How Susceptible Are Jobs to Computerization, Technological Forecasting & Social Change* 2017, vol. 114, DOI: <https://doi.org/10.1016/j.techfore.2016.08.019>.

Galbraith J.K., *The Ethical Rate of Unemployment: A Technical Note*, “Journal of Economic Issues” 1998, vol. 32(2), DOI: <https://doi.org/10.1080/00213624.1998.11506061>.

Gerdesmeier D., *Price Stability: Why Is It Important for You?*, Frankfurt am Main 2009.

Giugni M., Lorenzini J., Cinalli M., Lahusen C., Baglioni S., *Young People and Long-Term Unemployment: Personal, Social, and Political Effects*, London–New York 2021.

Hughes J. (ed.), *Technological Unemployment and the Basic Income Guarantee*, “Journal of Evolution and Technology” 2014, vol. 24(1).

International Federation of Robotics, *Executive Summary World Robotics 2018 Industrial Robots*, Frankfurt 2018.

International Federation of Robotics, *Robot Density Rises Globally*, Frankfurt 2018.

Kelso L.O., Adler M.J., *The Capitalist Manifesto*, New York 1958.

Keynes J.M., *The General Theory of Employment, Interest and Money*, London 1936.

Kieselbach T. (ed.), *Youth Unemployment and Social Exclusion: Comparison of Six European Countries*, Wiesbaden 2000, DOI: <https://doi.org/10.1007/978-3-663-11899-2>.

Krugman P., *Sympathy for the Luddites*, “New York Times”, 13.6.2013.

Kuczynski J., *Technological Unemployment*, [in:] *Trade Unions Study Unemployment*, Washington 1929.

Lahusen C., Giugni M. (ed.), *Experiencing Long-Term Unemployment in Europe: Youth on the Edge*, London 2016, DOI: <https://doi.org/10.1057/978-1-137-50487-6>.

Lodigiani R., Maino F., *Minimum Income, Active Inclusion, and Work Requirements in Europe: Insights from Community Service Projects Introduced by Italian Citizenship Income*, “Stato e mercato. Rivista quadriennale” 2022, no. 3.

Marx K., *Capital: A Critique of Political Economy*, Harmondsworth 1976.

McLaughlin E., *Understanding Unemployment: New Perspectives on Active Labour Market Policies*, London–New York 2002.

Merton R.K., *Three Fragments from a Sociologist’s Notebooks: Establishing the Phenomenon, Specified Ignorance, and Strategic Research Materials*, “Annual Review of Sociology” 1987, vol. 13, DOI: <https://doi.org/10.1146/annurev.so.13.080187.000245>.

Mlakar J.S. (ed.), *Unemployment: A Closer Look*, New York 2011.

Modigliani F., Papademos L., *Targets for Monetary Policy in the Coming Year*, “Brookings Papers on Economic Activity” 1975, no. 1, DOI: <https://doi.org/10.2307/2534063>.

Norton M.I., Ariely D., *Building a Better America – One Wealth Quintile at a Time*, “Perspectives on Psychological Science” 2011, vol. 6(1), DOI: <https://doi.org/10.1177/1745691610393524>.

Peters M.A., Jandrić P., Means A.J. (eds.), *Education and Technological Unemployment*, Singapore 2019, DOI: <https://doi.org/10.1007/978-981-13-6225-5>.

Ricardo D., *On the Principles of Political Economy and Taxation*, Kitchener 2004.

Rousseau J.-J., *Discourse on Political Economy and The Social Contract*, Oxford 1999.

Schor J., *Why Solving Climate Change Requires Working Less*, [in:] *Time on Our Side: Why We All Need a Shorter Working Week*, eds. A. Coote, J. Franklin, London 2013.

Schumpeter J.A., *History of Economic Analysis*, London 2006, DOI: <https://doi.org/10.4324/9780203983911>.

Smith A., *An Inquiry into the Nature and Causes of the Wealth of Nations*, London 1998.

Steuart J., *An Inquiry into the Principles of Political Economy*, London 1767.

Stockhammer E., *The Rise of Unemployment in Europe: A Keynesian Approach*, Cheltenham–Northampton 2004, DOI: <https://doi.org/10.4337/9781845421717>.

Wicksell K., *Lectures on Political Economy*, London 1977.

Woirol G.R., *The Technological Unemployment and Structural Unemployment Debates*, Westport 1996.

World Economic Forum, *The Future of Jobs Report 2018*, Geneva 2018.

## Online sources

Autor D., Salamon A., *Is Automation Labor-Displacing? Productivity Growth, Employment, and the Labor Share*, 27.2.2018, [https://www.brookings.edu/wp-content/uploads/2018/03/1\\_utorsalmons.pdf](https://www.brookings.edu/wp-content/uploads/2018/03/1_utorsalmons.pdf) (access: 11.10.2025).

Bristow T., Bloom D., *Elon Musk Hails Rishi Sunak's 'Essential' Decision to Invite China to UK AI Summit*, 2.11.2023, <https://www.politico.eu/article/elon-musk-hails-rishi-sunaks-essential-decision-to-invite-china-to-uk-ai-summit> (access: 17.10.2025).

Constantz J., Bloomberg, *Over 4,000 Workers Have Lost Their Jobs to AI since May, Outplacement Firm Estimates – and That's 'Certainly Undercounting'*, 8.2.2024, <https://fortune.com/2024/02/08/how-many-workers-laid-off-because-of-ai> (access: 17.10.2025).

Cooban A., *This CEO Replaced 90% of Support Staff with an AI Chatbot*, 12.7.2023, <https://edition.cnn.com/2023/07/12/business/dukaan-ceo-layoffs-ai-chatbot> (access: 17.10.2025).

Korn J., *Elon Musk Sees an AI Future Where 'No Job Is Needed'*, 3.11.2023, <https://edition.cnn.com/2023/11/02/tech/elon-musk-conversation-british-prime-minister-rishi-sunak-artificial-intelligence> (access: 17.10.2025).

Landymore F., *Sam Altman Warns That AI Is Gonna Destroy a Lot of People's Jobs*, 19.10.2023, <https://futurism.com/the-byte/sam-altman-warns-ai-destroy-jobs> (access: 17.10.2025).

Toh M., *SAP Is Restructuring 8,000 Jobs as It Shifts Focus to AI*, 24.1.2024, <https://edition.cnn.com/2024/01/24/tech/sap-restructuring-ai-jobs-intl-hnk> (access: 17.10.2025).

## ABSTRAKT

W niniejszym artykule rozważono różne scenariusze, które mogą się zrealizować po pojawieniu się sztucznej inteligencji podobnej do ludzkiej. Autor twierdzi w szczególności, że bezrobocie technologiczne (i ogólnie bezrobocie przymusowe) nie powinno być postrzegane wyłącznie jako kwestia techniczna należąca do dyskursu ekonomicznego. Bezrobocie technologiczne należy również postrzegać jako kwestię etyczną i prawną, ponieważ teoria, która powierza alokację zasobów i miejsc pracy wyłącznie prawu podaży i popytu, jest wyraźnie sprzeczna z Powszechną Deklaracją Praw Człowieka oraz różnymi kartami konstytucyjnymi i przepisami prawa powszechnego. Akty te stanowią, że praca nie jest jedynie szansą, którą mogą wykorzystać kompetentne osoby, lecz podstawowym prawem człowieka.

**Słowa kluczowe:** sztuczna inteligencja; bezrobocie; teorie ekonomiczne; Powszechna Deklaracja Praw Człowieka; nierówności



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