Artificial Intelligence and Demographic Changes: A Vision for 2050

Marius Vacarelu
National School of Political and Administrative Studies, Bucharest, Romania

marius333vacarelu@gmail.com

Abstract: There has been a lot of talk about AI in recent years, but mostly from two perspectives. First, there is significant interest in the issue of the relationship between AI and the political environment, which raises numerous questions regarding the temptation of dictatorships, as well as the far from innocent methods used to conduct electoral campaigns. The second major area of interest in AI research is related to the labour market, specifically how it is influenced and changed in real time, implicitly considering the situation of jobs lost or newly created. There is one aspect that influences both the labour market and a country's political choices, and that is demography. Obviously, it is not the only factor and cannot be analysed without considering its determinants: the economy, legislation, healthcare systems, etc. Since countries do not have the same population nor the same birth rates, it is important to try to understand "something" about the effects that new technology will bring to this area of interest, because from this we can make certain forecasts about the development of some countries, the decline of others, and – under certain conditions – even about changes to the borders of some countries. At this moment, it seems that governments (no matter their economic development level) are not fully aware of the changes that AI will bring regarding interpersonal relationships. If they are only interested in the political aspect, they will see that the demographic future of their own countries could also be influenced by AI devices, which become so integrated into the life of the average person and can completely change their outlook on life visions for having children, at least. As a result of these changes of children visions, however, it is possible that we will see countries seeking, including, unification with countries that are demographically stronger, because the population decline as an effect of AI will impact public budgets so much that they will become unsustainable, forcing the governments to search for a form of "saving the passive" through unification with other countries.

Keywords: Artificial intelligence, Demography, Changes, Countries, New realities

1. Introduction

In recent years, articles, studies, and volumes about Artificial Intelligence (AI) have exploded, practically every hour you will find new references in the press or in various scientific publications appearing in over 190 countries worldwide. A list of the titles of these publications from just the last year alone would fill hundreds of pages, which makes it quite difficult to track certain guidelines of the changes that AI brings to the life of each country, public or private institution, and individuals. Nevertheless, more than ever, there is a need for forward-thinking, starting with the next 25 – 30 years, considering that the middle of this century is at the same distance of time mentioned above.

The major changes this decade alone would be enough on their own to prompt reflection, as they have brought geopolitics, the economy, the climate situation, demography, and the relationship between governments and citizens into discussion.

However, humanity does not live in disconnected sequences of time, and what we see today in Eastern Europe or the Middle East represents the consequences of actions carried out over years or even decades, during which the different technical means of those years were used to achieve results that today – with the new capabilities of AI – can be (again) questioned (Indermit, 2020).

Among all the changes that will occur in the coming decades, there are some that are easy to anticipate, and many studies in recent years have already drawn accurate lines in this direction. However, it seems that fewer researchers have attempted to understand what changes AI will bring to the demographic sphere and what their consequences will be on governments' ability to remain as effective as they are today. The demographic declines foreseen as an effect of AI applications will have brutal impacts on pension budgets in many countries (Spears and Geruso, 2025), and from this arises the question: if the ratio between the young and elderly population will so drastically affect pension payments, could it also have other political implications, potentially even leading to the unification of states to expand the numerical base of the working population's taxation, thereby saving public budgets for several more decades (since it's not just pensions that will be affected).

2. AI and Economy

The consequences of implementing AI in the economy – and generally in the professional sphere – are evident to everyone, as work is what puts food on the table daily. Approximately 40 years of "active working life"

always involve the need to protect jobs by applying various techniques and procedures that invariably require adapting human behavior to the newest realities, no matter how pleasant or undesirable they may be.

However, we see that there are many other applications of AI across different fields – among which the medical one seems to be the most important (North, 2025) – and these offer us certain prospects for improving life, with the tools of this technology providing real chances to develop medicines faster that reduce or eliminate the effects of diseases that are very difficult to treat today.

The joy with which we welcome these results is overshadowed by the fact that AI cannot help to the same extent in other areas, and history adds to this dissatisfaction a wise lesson related to the emergence of high-impact technologies. A close look at the last two centuries – the period during which humanity's greatest technological advances were made – reveals that they imposed themselves or changed political and economic realities to such an extent that they forced many governments to act naively or too ambitiously, which has often meant that armed conflicts broke out between two or more countries (Alderdice, 2024). Without going into details – given the limited space of this text – let us point out that the major inventions of the first half of the 19th century (the train, telegraph, and machine gun) led between 1848 and 1871 to the great European revolutions, which changed the foundations of monarchy in the central and eastern parts of the continent, a Crimean War that opposed Russia to other European countries, the unification of Italy and Germany, as well as the civil war in the USA. The inventions of the early 1900s (the automobile, telephone, airplane, power plants, and petroleum-based fuel) were decisive for the First World War, while communications and tanks played the same role between 1939 and 1945 (World War 2) (Anzac Portal, 2025; Burton, 2025). For this reason, considering this typology of history, we might wonder if the widespread adoption of AI in human society will also occur through a major war, or as a consequence of such a large-scale military conflict – but this is not the main subject of this paper.

All these inventions – which were able to contribute to the political change of the world – did not operate in a vacuum. Each country had access to new technologies in varying degrees, which made the different geopolitical competitions unbalanced, and certain advantages were impossible to block until the end of the wars. But more than this technological differentiation, the human factor, demographics, as well as the state-political structure of each country played a role. Only in this way can the destruction of three empires at the end of the First World War and the establishment of communism be explained (Gerwath, 2018), and only these factors explain why over 70 independent states appeared in Asia and Africa after 1945 (Office of the Historian, 2022).

The emergence of AI is therefore not a matter taken out of a global context, like a "deux ex machina". On the contrary, its emergence has been anticipated for more than half a century (Mucci, 2024), and its effects could not be properly understood then by futurologists, because some major issues at the beginning of the 3rd millennium were not predictable. How many people would have said in the 1970s – when computers were beginning their path to what they are today – that the Soviet Union would no longer exist, that China would be a force in scientific research, that the planet's population would exceed 8 billion people, and that nature would be affected by a quasi-overwhelming anthropic phenomenon caused by global warming (Eyring et al., 2021)? These realities we live in today influence AI technologies in a way we are trying to fully understand, and in turn are influenced by the capabilities that different AI tools have. Obviously, they are interdependent, but a thorough analysis could be the subject of an entire volume, which forces us to focus especially on one of the fundamental aspects of this century, namely demography.

3. AI and Demography

Why must the relationship between AI and demography be studied very carefully? The answer is given by a phenomenon that begins at the end of the 1980s in most developed countries, which are the most capable of bearing the costs of implementing this technology, because the diversification of their own economic agents offers a broad perspective on the use of AI. Specifically, since the late 1980s, developed countries have entered a phase of demographic decline, and the main source of growth – where it exists – is represented by migration from poorer countries (Sasaki, 2023).

The prospects for demographic growth in these countries – with the exception of the USA – depend primarily on migration, which means that the national and ethnic landscape in these decades and the following ones involves a reduction in the cohesion that these types of centuries had (Filipenco, 2025). The integration of millions of migrants – in 2024, the number of those who have left their country is approximately 283 million globally (IOM, 2024) – is challenging, as there are issues to be resolved starting with learning new languages;

integrating the children of these migrants into school systems; accommodating these new residents in cities that are increasingly crowded, demographically dense, and have traffic flow problems, etc. (OECD, 2020).

Europe is the continent with a population density in its most developed part that exceeds 100 people per km², and the increase in migration from other continents (predominantly) further increases the pressure on infrastructure that was designed in the 19th or 20th century, when transport systems and the number of car owners were much smaller than today (Guerra et al., 2023). Thus, a phenomenon arises where many migrants live in small spaces to reduce their own costs, often working in low-skilled positions, taking jobs that natives refuse (Hayo and Roth, 2024).

The philosophy from the 1990s (the year when the great international migration began, according to UN data) to 2022 (the year Chat GPT application appeared) was essentially simple: external migration was accepted for low-skilled jobs, while natives would take on more complex and better-paid jobs (Harris, 2003). Obviously, not all migrants had low-paid jobs, and over time some integrated enough to receive citizenship in developed countries and contribute significantly to their progress in various fields (for example, in sports).

The widespread emergence of AI tools, however, poses a problem, as this technology directly affects a good portion of jobs that involve repetition and a lower degree of specialization (Petropoulos and Brekelmans, 2020), meaning some of the migrants' jobs disappear. This does not mean, however, that those people will automatically return to their countries of origin, and their lost jobs will make many thousands of people vulnerable, creating pressure on social security systems in developed countries, as well as an increase in poverty in migrants' home countries, which will lose large amounts from remittances.

This economic aspect will also have a significant demographic effect, regardless of ethnicity: in countries where AI tools are strongly implemented, lost jobs will affect many sectors of activity, causing young couples to think twice about whether they want to have children (Neugnot-Cerioli and Muss Laurenty, 2024), since there is no medium-term certainty about their money and professions.

In essence, the last few decades have changed the idea of having children almost everywhere in the world (Berg and Wiseman, 2024). While for hundreds and thousands of years, children were born to carry on the family line – due to the low life expectancy, less than 30 years until the early 20th century (Herre, 2025) – and to provide enough labor for agriculture and manufacturing, this no longer happened after the baby-boom wave ended. The increase in life expectancy, combined with the quality of medical care, led families to reduce the number of children, who this time mostly reach adulthood, and what was offered to them during childhood and adolescence was something that even kings could not provide to their own children before the 20th century (Harris, 2017). Toys, quality education, travel within the country and abroad – all these things cost money, and in many countries, the population can afford to provide them to children to a reasonable extent. However, these achievements had a background, namely economic growth and the diversification of industry and the tertiary sector, which made jobs relatively secure over long periods, offering prospects for planning family expenses related to housing and children.

However, the emergence of AI brings a major problem to this life planning model, because one of the main effects of its applications in the economy is the reduction of today's jobs, and any replacements for lost salaries will happen neither automatically nor immediately (Filippucci et al., 2024). The pressure on jobs is increasing, and this is already being observed in all developed countries or those with a reasonable level of economic progress, which amplifies stress and concern about the future. Moreover, the fact that AI's action is linked to the entry-level professions (Constantz, 2025), where first things are learned, followed by promotion to more advanced tasks, already has a brutal effect on beginners, who are young and at the start of a path that would also involve starting families and procreation. Now, in a situation where jobs are so heavily threatened, can they still easily have thoughts of "emotional bonding" that would materialize in family and children? This is a real question, troubling not only the young people starting their professional careers today but also their parents, who are forced to continue supporting them, because no matter how much willpower they have to find a job, AI applications have a better position on this labour competition.

The impact on jobs always has effects in the demographic sphere, because no parent would want to have a child they would raise with great difficulty. This feeling is common throughout history and was most visible during times of drought or war, because until the beginning of the 20th century these events were both difficult to predict and especially hard to combat. However, the development of contraceptive methods has intensified this sense of family planning, and having a child increasingly becomes a proof of financial capacity, alongside the love that motivates parents (Van Winkle and Monden, 2022).

However, the economic-industrial revolution brought by AI is a new and contemporary one, which means we do not fully know all the consequences of its implementation, but we see its effects daily in the press and everyday dialogue (Rosa et. Al., 2025). We should therefore expect a decline in births in countries where governments and economies do not adapt quickly, which will, however, mean higher costs in social insurance for the unemployed, as well as a threat to pensions, which are endangered both in the long term (based on birth reductions) and especially as an effect of increasing unemployment (Wilshire, 2024).

We assert that there will be an increase in unemployment given the figures regarding young people entering the profession in the last two years – in the United Kingdom, for example, 33% of graduates do not find a job (Almeida, 2025) – and the demographic effects will be seen before the end of the decade, which means that in the years 2035 – 2050 the effects will be even more pronounced at the level of schooling in high schools and especially universities. In practice, high schools and universities will have a problem with recruitment, because there will certainly be many cases where families, seeing how difficult it will be to get "office jobs" in the AI era, will no longer want to bear the costs of education. As the guarantees decrease that, at the end of their studies, young people will find a prestigious and well-paid job based solely on a university diploma, many parents will prefer not to pursue this path for their children, but rather seek to guide them toward safer jobs that are less threatened by AI capabilities.

But this demographic aspect – affected by the economic situation brought about by AI implementation – is not uniform, not even at the level of a continent. Economic differences will mean that solutions from one country cannot be applied in other areas, because not everyone has the same financial power to implement the various industrial visions.

4. AI and its Consequences in the Demographic Sphere

But just as important are certain political or cultural particularities that will affect the demographics depending on how many AI devices are used in national economies.

Thus, we must start from the reality that not all countries in the world are democracies (EIU, 2024), which means that AI implementation is not done everywhere solely for commercial purposes. AI capabilities are huge, and an authoritarian government will use them without moral concerns and especially without legal worries to monitor its own citizens (Jafari Hezarany, 2024), which means the state will have access to people's private lives to a significant extent. If people were content to live in such states, there would be no implications for demographics, but usually, this pleasure does not exist, which makes young people think twice before having children, because they are – due to a lack of maturity – both subjects of the state's propaganda use and a factor in monitoring their own families, as they will reveal what happens at home, and AI tools can record even this data in kindergartens and schools. Far from being a utopian or crazy idea, it was applied in communist countries as early as the 1920s (Hola and Drumbl, 2025), without today's capabilities of personal surveillance and data collection.

Cultural aspects in the relationship between AI and demography must not be ignored either, because they can strengthen the cohesion of a nation, but they can also signal potential problems or future social explosions. Culture is something that manifests in relation to the past, which means that certain practices or customs applied for decades or hundreds of years can be difficult to eradicate in this century, or – in certain situations – can actually be reinforced by AI technologies. Thus, we must remember that in several countries in Asia and Africa, female children are not highly valued (Portner, 2015), for reasons we will not discuss here. AI appears today – and will even more so in the future – as an aid to the medical system, and here we note that this technology will facilitate finding out the sex of the foetus from the first weeks of pregnancy, which will result in an increase in the number of selective abortions (Pison et al., 2014). Over time, this selection during pregnancy will have the effect of modifying the social and political ratios in those countries, as there will be more men of marriageable age, but far fewer women for that. As a result, dissatisfaction among each person will grow, and a large number of unmarried men may be much more willing to engage in social revolts, clashes with law enforcement, and even provoke changes in political leaders. Far from being a joke, this imbalance could even lead to a form of trafficking of women from poor countries to rich ones, solely for maintaining intimate relationships or even marriage (the phenomenon is already common in the Laos – China relationship). The intermixing that will occur in the coming decades may also lead to other political reactions, of a xenophobic nature, which will want to expel migrants from those countries, but the need to balance the ratio between men and women will be an objective one, and based on it governments will be willing to facilitate certain practices on the edge of legality.

The issue of selective abortions primarily affects poorer countries, but those that are culturally within a hierarchical paradigm of gender relations. Obviously, it can be said that in countries where contraceptive methods are scarce, finding out the fetus's sex early on will be more difficult. This is true today, but over time some of the costs of using AI for certain operations/tasks will be lower because what is easy to do will have lower prices, and only highly complex matters will be accessible solely to governments or large companies.

In any case, in the future AI will be useful for early detection of certain diseases, even during pregnancy, which will likely lead to other abortions, but strictly for medical reasons. Let us not forget that in this matter medical capacities will face a double barrier, which will be easier to overcome in some countries, namely the power of certain religious cults. In some countries, these cults are so strong that they influence state legislation, banning abortions, which will not be highly appreciated by future parents who can find out with the help of AI about possible serious diseases of those who will be born in a few months. For this reason, it is foreseeable that the relationships within the quadrilateral of medicine – AI – religion – abortion will be difficult, leading including to a decrease in the number of practicing believers, alongside other possible dissatisfaction toward religious cults that oppose new medical practices based on books unchanged for over a millennium (He, 2024).

One last necessary clarification regarding the prevalence of births predominantly of male children. An imbalance in the sex ratio can be a basis for increasing societal surveillance systems to a dictatorial level, because too much tension in society and too many men with the physical capacity to protest violently – without the self-protective restraint due to the awareness that a wife and one or more children are waiting at home – pose a threat to any government with weak administrative performance. For this reason, we will be able to observe the deterioration of legality and democracy in some countries in relation to this imbalance, which AI will accentuate.

The phenomena described above mainly originated either from economic realities or from the influence of hierarchical cultural typologies, in which the entire society follows certain strict rules that can only be broken by those with enough political power or money to avoid potential fines or prison sentences. But the last decades – actually, since the emergence and expansion of the internet – have presented governments with a major demographic challenge, namely the inhibition of sexuality toward real people. Thus, studies from recent years reveal a lower interest among young people in maintaining intimate relationships, which has a destructive effect on demographic prospects. Moreover, the mental state of young people is more vulnerable than that of previous generations, making them more anxious, more stressed, less capable (and also less willing) to take on responsibilities. It is evident that having a job and having children represent strong sources of stress, and escaping into the virtual world is a solution (also in friendship with animals). Thus, it is harder for these young people to socialize, to participate in community life, and their refuge – and at the same time the place where they feel protected – is the electronic space, where AI is manifesting more and more frequently (The Economist, 2025). However, this "withdrawal into virtual space" worries governments, who consequently see themselves affected demographically even more rapidly, which causes the age balance to tilt profoundly, and the incomes of pensioners and public budgets to be heavily impacted. What can be done here? Obviously, the answer must be formulated wisely, but it must be kept in mind that this lack of participation in community life ultimately leads to the atomization of society and, in the end, to a demographic decline of large proportions.

The automation that AI brings to many industries will most likely also lead to another economic operation, but with multiple demographic effects. Specifically, some large companies will no longer outsource their own factories, keeping them in their own countries, because labor costs will decrease. Industrial robots will do most of the work, so fewer people will be needed to operate an industrial cycle, which will make it less necessary to move production to continents with poorer countries.

However, this will not be well received in those economically vulnerable countries, which will become even weaker, and the cycle of poverty (families – children – lack of access to higher education – low income) will widen, forcing governments into difficult, politically risky operations just to maintain a certain social peace. At the same time, bringing factories back to developed countries will mean a reduced need to accept foreigners, because the national workforce, even if declining, will be sufficient for their own national economies. Therefore, the ethnic landscape will most likely become more uniform, and some foreigners will have to return to their countries of origin, which will bring the families they left back to a lower economic level (Scott et al., 2022).

A specific note still needs to be added regarding a phenomenon that will appear, I believe, in 20 or 30 years as a result of the same demographic decline, which will be intensified by the effects of AI technologies.

Specifically, countries have different demographic sizes, and the sharp declines in places where there are currently 5 million inhabitants or fewer will have serious effects on budgets and pension systems, but generally on the functionality of the state and society.

AI will operate everywhere, albeit at different speeds, but demographic decline will be a certainty in Europe – a continent with a fairly strong economy but with most countries having fewer than 20 million people. In this perspective, where population decline is a reality, small countries face a possible solution: unification with other countries, either of similar size, larger, or – in the European case – into a genuine USE (United States of Europe). This scenario should not be underestimated, as it can only be reversed by a combination of demographic and economic growth.

The big problem for small countries is that economic growth depends quite a lot on the demographic size, and the numerical decline leaves few options. If today we might smile at these ideas, let's analyze the UN figures for world demographics in 2050 and 2060, and perhaps the smile will turn into something else, not very pleasant but realistic.

5. Conclusions

The dimension of the relationship between AI, demography, and the state in the long term - over a period of at least two decades - is still quite difficult to anticipate, because governments have simple interests, which involve economic growth and population growth, which comes into conflict with much of the realities we already live with. However, certain trajectories can be observed, which reveals the power with which new technology makes its way into each of our lives.

For many reasons, which I have tried to present in this paper, demography will play a fundamental role in guiding government actions. Demography will be the factor that forces the resizing of public budgets, because one of the effects of AI technologies is to reduce the number of newborns, shifting the balance between the active population and retirees, thus reducing many developmental prospects for countries around the world, especially those with developed economies. For this reason – demographic imbalance – I believe that one of the very likely effects in the coming decades will include the unification of some countries that will no longer feel secure about their demography, that will have too unfavourable a ratio between retirees and the active population. The future will confirm or refute this hypothesis, which I still believe will be difficult to avoid, especially in countries that have already experienced a significant decline in the number of children in this millennium.

Ethics declaration: I declare that in this text the rules regarding academic ethics and integrity have not been violated.

Artificial Intelligence declaration: I declare that Artificial Intelligence was not used in this text either for research or for the conception or writing of the text, with each sentence belonging entirely to me.

References

Alderdice, J. (2024) "New Technologies in Wars, Old and New," *New England Journal of Public Policy*, Vol. 36: Iss. 1, Article 4.

Anzac Portal (2020), "Technology and equipment developed during World War I", [online], Anzac Portal, https://anzacportal.dva.gov.au/wars-and-missions/ww1/military-organisation/technology-and-equipment.

Almeida, L. (2025) "UK graduates facing worst job market since 2018 amid rise of AI, says Indeed," [online], The Guardian, https://www.theguardian.com/money/2025/jun/25/uk-university-graduates-toughest-job-market-rise-of-ai.

Berg, A. and Wiseman, R. (2024) *What Are Children For?: On Ambivalence and Choice*, New York: St. Martin's Press.

Burton, K.D. (2025) "The Scientific and Technological Advances of World War II", [online], National WW2 Museum, https://www.nationalww2museum.org/war/articles/scientific-and-technological-advances-world-war-ii.

Constantz, J. (2025), "Is AI Killing Entry-Level Jobs? Here's What We Know," [online], Bloomberg, https://www.bloomberg.com/news/articles/2025-07-30/ai-s-takeover-of-entry-level-tasks-is-making-college-grads-job-hunt-harder.

EIU (2024) Democracy Index 2024, [online], Economist Intelligence Unit, https://www.eiu.com/n/campaigns/democracy-index-2024/.

Eyring, V. et al. (2021) "Human Influence on the Climate System", [online], The United Nations – The Intergovernmental Panel on Climate Change, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter03.pdf.

Filipenco, D. (2025) "Countries with the highest rate of population decrease", [online], DevelopmentAid, https://www.developmentaid.org/news-stream/post/152772/top-20-countries-with-the-highest-rate-of-population-decline.

Gerwarth, R. (2018) "1918 and the End of Europe's Land Empires", in Thomas, M. and Thompson, A.S. (eds), *The Oxford Handbook of the Ends of Empire*. Oxford: Oxford Handbooks (2018), pp. 27 – 42.

Guerra et al. (eds.) (2023) *European planning history in the 20th century. A Continent of Urban Planning*, Routledge, London.

Harris, C. (2017) *Raising Royalty: 1000 Years of Royal Parenting*, Toronto: Dundum Press.

Harris, N. (2003), "Economic Migration and the European Labour Market," [online], European Policy Centre, https://www.epc.eu/publication/Economic-Migration-and-the-European-Labour-Market-22a718/.

Hayo, B., Roth, D.H.R. (2024) "The perceived impact of immigration on native workers' labour market outcomes", in *European Journal of Political Economy*, Volume 85, DOI: https://doi.org/10.1016/j.ejpoleco.2024.102610.

He, Y. (2024) "Artificial intelligence and socioeconomic forces: transforming the landscape of religion", in *Humanities and Social Sciences Communication,* 11, 602 (2024). DOI: https://doi.org/10.1057/s41599-024-03137-8.

Herre, B. (2025) "Global average life expectancy has more than doubled since 1900," [online], Our World in Data, https://ourworldindata.org/data-insights/global-average-life-expectancy-has-more-than-doubled-since-1900.

Hola, B. and Drumbl, M.A. (2025) *Children as Informers and Denouncers*, Routledge, London.

Indermit, G. (2020) "Whoever leads in artificial intelligence in 2030 will rule the world until 2100," [online], Brookings Institution, https://www.brookings.edu/articles/whoever-leads-in-artificial-intelligence-in-2030-will-rule-the-world-until-2100/.

IOM (2024), "World Migration Report 2024," [online], International Organization for Migration, https://publications.iom.int/books/world-migration-report-2024.

Jafari Hezarany, N., "Technology and Totalitarianism: Artificial Intelligence a Tool for the Dictator?!" [online], https://ssrn.com/abstract=4872389.

Mucci, T. (2024), "The History of AI", [online], IBM, https://www.ibm.com/think/topics/history-of-artificial-intelligence.

Neugnot-Cerioli, M. and Muss Laurenty, O. (2024) "The Future of Child Development in the AI Era: Cross-Disciplinary Perspectives Between AI and Child Development Experts", [online], Everyone.ai, https://everyone.ai/wp-content/uploads/2024/05/EveryoneAI.ResearchPaper.pdf.

North, M. (2025) "6 ways AI is transforming healthcare," [online], World Economic Forum, https://www.weforum.org/stories/2025/03/ai-transforming-global-health/.

Filippucci et al. (2024) "The impact of Artificial Intelligence on productivity, distribution and growth: Key mechanisms, initial evidence and policy challenges," [online], OECD, https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/04/the-impact-of-artificial-intelligence-on-productivity-distribution-and-growth_d54e2842/8d900037-en.pdf.

OECD (2020) "Towards 2035 Making Migration and Integration Policies Future Ready", [online], OECD, https://www.oecd.org/content/dam/oecd/en/events/2020/1/ministerial-meeting-on-migration/migration-strategic-foresight.pdf.

Office of the Historian (2022) "Decolonization of Asia and Africa, 1945 – 1960", [online], Office of the Historian, https://history.state.gov/milestones/1945-1952/asia-and-africa.

Petropoulos, G. and Brekelmans, S. (2020) "Artificial intelligence's great impact on low and middle-skilled jobs", [online], Bruegel, https://www.bruegel.org/blog-post/artificial-intelligences-great-impact-low-and-middle-skilled-jobs.

Pison, G. et al. (2014), "Selective abortion in Asia", [online], The French Institute for Demographic Studies, https://www.ined.fr/en/everything_about_population/demographic-facts-sheets/focus-on/selective_abortion_Asia/.

Portner, C. (2015) "Sex-Selective Abortions, Fertility, and Birth Spacing. Policy Research Working Paper; No. 7189", [online], World Bank, https://openknowledge.worldbank.org/entities/publication/bb385427-8c80-55be-ae19-1eace2b3ae15.

Rosa, T. et al. (2025) "From risk to reward: AI's role in shaping tomorrow's economy and society", in *AI & SOCIETY. Journal of Knowledge, Culture and Communication*, DOI: https://doi.org/10.1007/s00146-025-02428-1.

Sasaki, H. (2023) "Growth with automation capital and declining population," in *Economics Letters*, Volume 222, DOI: https://doi.org/10.1016/j.econlet.2022.110958.

Scott, R.E. et al. (2022), "Botched policy responses to globalization have decimated manufacturing employment with often overlooked costs for Black, Brown, and other workers of color", [online], Economic Policy Institute, https://www.epi.org/publication/botched-policy-responses-to-globalization/.

Spears, D. and Geruso, M. (2025) *After the Spike: Population, Progress, and the Case for People*, New York: Simon & Schuster.

The Economist (2025) "Young Chinese are turning to AI chatbots for friendship and love", [online], https://www.economist.com/china/2025/05/15/young-chinese-are-turning-to-ai-chatbots-for-friendship-and-love.

Van Winkle Z., Monden C. (2022) "Family Size and Parental Wealth: The Role of Family Transfers in Europe", in *European Journal of Population*, March 31; 38(3):401 – 428. DOI: 10.1007/s10680-022-09611-w.

Wilshire, C. (2024) "Artificial Intelligence and the Great Retrenchment", [online], The Social Policy Group Australia, https://socialpolicy.org.au/wp-content/uploads/2024/12/SPG_AI_and_the_Great_Retrenchment.pdf.