

DOI:10.5281/zenodo.17102757

ARTIFICIAL INTELLIGENCE AND DECISION MAKING IN THE ECONOMY IN THE CONTEXT OF INTERNATIONAL MOBILITY

Matei DUMITRESCU, PhD Student

University of Bucharest, Romania;

Co-tutoring, Free University of Brussels, Belgium

mateidumi7@gmail.com

Abstract: *In the last decade, Artificial Intelligence (AI) has become a key component for the development of decision-making systems in the economy in the context of international mobility. AI algorithms have been developed for various applications in the economy, such as decision-making at the firm level to the prediction of macroeconomic policies at the government level. At the macro level, AI contributes to the precise implementation of policies for the integration of people from international mobility into the economy in order to efficiently manage resources. At the micro level, AI supports companies in obtaining competitive advantages by optimizing supply chains, personalizing job offers and efficiently managing customer data. Finally, the conclusions highlight the importance of ethical, privacy and accessibility challenges regarding the use of AI for the integration of people and resources into the economy in the context of international mobility.*

Keywords: *EU, human mobility, AI, decision making, economic stability*

JEL Classification: *C23, C26, C38, C55, C81, C87*

1. Introduction

The contemporary period is an era of international human mobility, on a very large scale, in which approximately 200 million international migrants from all over the world seek economic opportunities and social security. A large-scale phenomenon, as economies open, international migration has sometimes seen dramatic increases. In European regions, third-country nationals, in 2023, represented 9% of the population, with women being almost half (48%) of the migrant population. Outcome indicators highlight significant gaps between people coming from mobility and native populations in the areas of work and education. Thus, increasing migration has become a major problem of the

contemporary world. Under the reign of the global multi-crisis, the integration of migrants remains a challenge for all destination states, classic and new, which are faced with a significant influx of immigrants, with high levels of voluntary or forced, legal or irregular mobility. At the international level, a broad, but not unique, framework for migration governance has been established, which supports this process, especially at the national level, and which includes binding norms of international law, best practices and non-binding principles to facilitate regular migration and the integration of migrants. In this context, decision-making systems based on Artificial Intelligence algorithms began to be used.

Decision-making is today an increasingly difficult process, due to the increase in the volume of information circulated and the degree of complexity of decision-making problems.

According to the specialized literature, solving a decision-making problem is a process based on the following stages:

- investigation of the problem in which an attempt is made to formulate and define it;
- conception that involves the development of different possible solutions for the previously defined problem;
- decision in which the best solution must be chosen depending on the objective pursued and the criteria imposed;
- evaluation involves the analysis of the effects of the decision as well as ensuring its application.

For this reason, decision makers need technical assistance to make quality decisions in a minimum amount of time. This assistance can be provided by using Decision Support Systems. Such a system is an interactive computer system designed to support the decision-making process. It should be noted that decision support computer systems involve the use of AI concepts and algorithms. The development of a decision support computer system must be based on a set of characteristics, the most important of which are:

- to be flexible and generate as many options as possible for data analysis and evaluation;
- to be able to develop a wide variety of styles and classifications;
- to have the ability to analyse as many decision alternatives as possible and their consequences.

AI is increasingly being used in the context of migration and international mobility to integrate people into the economy. Applications with AI algorithms for decision-making are used in the mobility process, for example for identity verification, visa application submission and processing, but also to predict trends in economic integration and resource management. However, AI poses a variety of challenges for policymakers, practitioners and migrants,

including concerns about the surveillance of individuals through technology, the potential for systemic bias in AI decision-making in the areas of migration and mobility, increased interactions between the public and private sectors and their competing interests, and the negative impact of AI technologies on the protection of human rights for migrants (Beduschi, 2022).

2. Theoretical framework: Europeanism and (anti)discrimination in EU member states in the context of mobility

The construction of this human identity was not an easy task. It has been the result of gestation by a long and vast historical process with the intervention of a rich and varied multiplicity of factors, rhythms and circumstances that, in a desire to synthesize, can be reduced to four foundations that gave shape and meaning to the concept of European culture: Greek culture, Roman jurisprudence Christianity and the Political Heritage of the Germanic Peoples (Vergara, 2007).

The foundations are closely linked to the question of inclusion and exclusion is that of how the constituent elements of Europe should be integrated into the European entity. *Prima facie*, the dominant hypothesis, from the proposals of the “United States of Europe” to the EU enlargement mechanisms to the “candidate countries”, was that a consolidated Europe would take the form of a partnership between European states, agreed via intergovernmental agreements. Europeanism also understands other models, ranging from conceptions of Europe as a union of alternative spatial or demographic units – “peoples”, nations, regions, see workers’ councils – to those of an undifferentiated community or even subsumed administrative subunits of a monolithic nation-empire (Ostrowski, 2023). But these conceptions were significantly altered with the strong national feeling developed from the First World War and the effects are seen even today.

“Europeanism” is understood as “social and cultural civilization” and is opposed to “distant countries.” It is also important to note that, talking about the “similarity” of Ukrainian refugees with Europeans, none of the journalists mentions a specific country or a country in the European Union, which makes “Europeanness” an object of knowledge and control. At the same time, in the given quotations of refugees from distant and poor countries (most often Afghanistan, Iraq or Syria) act as a collective “Other,” without provoking outrage or sympathy from the authors of the quotations. Often, the names of these “other” countries are given as an example. This creates the effect of “standardization” of the image of the refugee as coming from the poor, underdeveloped countries are a typical representative of the indigenous ethnic groups of these countries (Morgunova and Moraru, 2022).

We will argue that the injunction to “go back to Europe” by Europeanization is made possible and conditioned by the mythologies of Western civilization, and that Europeanization both marks (enacts) and demarcates (naturalizes) racial whiteness. In other words, we view Europeanization as a deeply – albeit contingent – racialized process, where racial whiteness is trivialized as a “natural” contiguity of the West (Nadzeya et al., 2023).

The issue of migration, legal and illegal, is present in the policies of all European Union states, and the creation of the Schengen Area as an area without internal borders in which the free movement of people is ensured, requires efficient management of the external border for its proper functioning. This area is conceived as an area of freedom, security and justice, within which there is a common policy on asylum, immigration and management at the external borders of the Union. Analyzing the structure of immigration policy networks can provide important insights beyond those found in other political and economic characteristics. The examples also illustrate that network size and structure matter beyond a simple count of how many social ties each member has and suggest that measures of betweenness or centrality capture different aspects of network structure. This illustrates that migration governance is of real practical interest to all European states but raises the question of identifying those areas and sub-areas of integration policies that could contribute most significantly to superior macroeconomic performance.

2.1. Methodology: case selection, sources, type of analysis

At the administrative level

Article 2 of Chapter 1 of Directive 2001/55/EC, titled “General provisions” contains a definition at point c) that specifies the people who can be considered as “displaced persons” (United Nations, 1951). Sub-point i) places people who have fled areas of armed conflict in a special category that should benefit from immediate and temporary protection. Directive 2001/55/EC also stipulates the obligation of Member States to respect the rights of refugees relating to the status of refugees agreed in the Geneva Convention of July 1951. to refugees without discrimination as to race, religion or country of origin (United Nations, 1951). In France, the temporary protection directive has been valid for three months granting several rights to exiled people: a right to reside, access to the labor market, housing, education or even social and medical benefits. But foreign students living in Ukraine were excluded from this emergency provision.⁸ In no other conflict, involving large population displacement, whether Iraqi, Afghan, Syrian, Libyan, the countries of the Union had adopted such a provision. 2001 in the wake of the Balkan War (France 24, 2022). A major controversy is thus open in French society that is sorting out refugees fleeing the war in Ukraine

on criteria that clash with the definitions of international conventions. Pierre Henry, the president of France Fraternities, explains to France 24 that “France has excluded foreign students from temporary protection by giving them a one-month residence permit and considering that after all, their country of origin is not at war, they could return” (France 24, 2022).

At the level of borders

The central question in ideological debates about Europe’s borders is which regions of the continent are included and excluded from the term “Europe”. The prospects of European integration have revolved around relations between France and Germany since the beginning of the modern European debate; around them clustered a coherent set of nations, including the Benelux and Italy, which together formed the heart of Europe (Ostrowski, 2021). as the continentalist epicenter of European unification projects. With the invasion of Ukraine by the Russian army on February 24, 2022, we have again seen the political and media news of the last year being saturated with the issue of borders. The conflict over the European Union’s eastern demarcation line reinforces the discussion around borders as a political object and the need to study borders and their effects. Controversies over borders in Europe are not new. They continue after the Syrian refugee crisis of 2015 when more than 100,000 migrants and refugees arrived in Europe via the Mediterranean according to the United Nations Refugee Agency (Guerres, 2009).

At the border level, systems are used for decision-making based on AI algorithms for facial recognition, fingerprinting, person identification and possibly video monitoring of migrant reception centers. Thus, it is possible to simulate the effects of decisions by using models, estimating the consequences of decisions, developing alternatives, optimizing solutions, etc. It is observed that the activities developed by the system are of the type of prediction, simulation, optimization. Knowledge-oriented decision support systems use concepts and methods of artificial intelligence. These are also called intelligent decision-assistance or expert information systems. Document-oriented decision support systems ensure the storage and retrieval of documents and information by using search engines. Communication-based decision support systems have as their main element communications based on computers and computer networks (Ujwary and Florek-Paszkowska, 2025). Analyzing the previous classification, it can be observed that the specific functions of a decision-support system refer to: data management, model management, knowledge management and management of system communication with the user.

Figure 1 schematically presents the three components of the decision support system according to the specialized literature (Ujwary, Florek-Paszkowska, 2025).

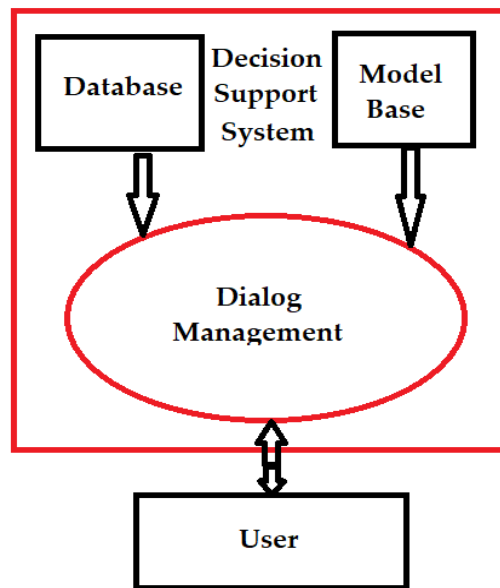


Figure 1. Decision support system architecture.

The data management subsystem component includes data relevant to the decision-making problem and is managed by software called the database management system. The model management subsystem includes quantitative models that provide the system with analytical capabilities, as well as modeling languages that allow the development of new models. The dialogue management component refers to the software and hardware resources involved in developing the interface of the decision support system. In the case of intelligent decision-making assistance systems, architecture includes the following components: the data management subsystem, the model management subsystem, the knowledge management subsystem, and the dialogue management subsystem or user interface (Ujwary and Florek-Paszkowska, 2025). It is noted that this approach refers to a knowledge-oriented decision support system or expert system. The expert systems used in this context will focus on analyzing the decision-making problem and identifying models that can provide solutions for it. However, many sociologists and political scientists insist that we have entered a postmodern era in which the boundaries of politics tend to disappear, dissolved by economic flows, networks of non-governmental actors, the primacy of international law and the exploitation of medical technologies. and means of transport (Ostrowski, 2023). The first fact that strikes in this statement is the

utter contradiction with political discourses in countries like Hungary where differences between men are used to emphasize the importance of preserving borders through strict and targeted controls put in place by the enemy. Since the 2015 refugee crisis, Hungary has refused to admit refugees from non-EU countries (BBC News, 2020). Prime Minister Victor Orban has described non-European refugees as Muslim invaders and migrants as poison (DW, 2022) claiming that Hungary should not accept refugees from different cultures and religions to preserve its cultural and ethnic homogeneity in Europe, May 2016 of justice concluded that Hungary's arbitrary detention of asylum seekers in transit areas at its border with Serbia was unlawful (DW, 2022).

At the level of the press and media

Europeanism is often portrayed as a kind of emerging social property, a picture that aims to capture an idealized vision of European perfection (Beverelli, 2022) The print press and reports that covered the massive influx of people resulting from the invasion of the invasion sound in the name of how worthwhile the Europeanists and who reinforce principles or characteristics related to the political, economic and cultural unity of the European continent.

3. Conclusion

The rich literature on migration and mobility governance, on migrant integration policies, has not led to a single point of view on their implications. There are several studies whose conclusions have not tended towards an effect on the economic integration of migrants (Blumenstock, Chi, and Tan, 2022). However, our analyses confirm (for a large sample of countries) previous economic studies have also focused on individual countries and have shown that immigration policies affect the economic integration of migrants (Council of the European Union, 2024a, 2024b). In conclusion, migration policies affect the economic integration of migrants, differentiated by targeted measures that can constitute starting points for improving the lives of migrants in destination countries, as well as their contribution to achieving superior performances of macroeconomic outcomes.

This illustrates that migration governance is of real practical interest to all European states but raises the question of identifying those areas and sub-areas of integration policies that could contribute most significantly to superior macroeconomic performance.

As highly generalizable conclusions:

- a) Labour mobility policy is closely linked to family reunification policy,
- b) There is a certain inconsistency/inadvertence between Labour mobility policy and education policy,

c) The use at EU level of AI-based decision-making systems for the integration of people with migration and mobility backgrounds in macroeconomics (Frontex, 2023).

References

- BBC News (2020). EU court Censures Hungary Over Migrant Detentions, Mai 14, 2020. Lien: <https://www.bbc.com/news/world-europe-52663910>
- Beduschi, A. (2022). *Artificial intelligence, migration and mobility: Implications for policy and practice*. World Migration Report. Geneva: International Organization for Migration.
- Beverelli, C. (2022). Pull factors for migration: The impact of migrant integration policies. *Economics & Politics*, 34(1), pp. 171–191.
- Blumenstock, J., Chi, G. and Tan, X. (2022). Migration and the Value of Social Networks, Gender, Growth, and Labour Markets in Low Income Countries Programme (G²LM|LIC) *Working Paper* No. 60. Bonn: IZA.
- Council of the European Union (2024a). Proposal for a Regulation of the European Parliament and of the Council introducing a screening of third country nationals at the external borders and amending Regulations (EC) No 767/2008, (EU) 2017/2226, (EU) 2018/1240 and (EU) 2019/817, No 6403/24.
- Council of the European Union (2024b). Proposal for a Regulation of the European Parliament and of the Council addressing situations of crisis and force majeure in the field of migration and asylum, No 6379/24.
- DW (2022). Victor Orban's Most Controversial Migration Comments. DW, March 2, 2022. <https://www.dw.com/en/viktor-orbans-most-controversial-migration-comments/g-42086054>
- Vergara, J. (2007). The History of Europe and its constituent Countries: considerations in favour of the new Europe. *Journal of Social Science Education*, 6(1), pp. 15–22.
- France 24 (2022). Une situation absurde : la galère des étudiants africains en France après avoir fui l'Ukraine. *France 24*, Mai 04, 2022. <https://www.france24.com/fr/france/20220504-une-situation-absurde-la-gal%C3%A8re-des-%C3%A9tudiants-africains-en-france-apr%C3%A8s-avoir-fui-l-ukraine>
- Frontex (2023). *Detections of illegal border-crossing*. News release. Warsaw: Frontex.
- Husakouskaya, N. and Gressgård, R. (2020). Europeanization as civilizational transition from East to West: Racial displacement and sexual modernity in Ukraine. *Intersections. East European Journal of Society and Politics*, 6(3), pp. 74–96.
- Jourdain, E. (2009). *Guerres, frontières, politique dans*. Les champs de Mars, pp. 5-17, 2009. <https://www.cairn.info/revue-les-champs-de-mars-ldm-2009-1-page-5.htm>

- Morgunova, O. A., & Moraru, N.-F. (2022). Discourses of “Europeanness” in asylum practices in the postcolonial context. *Vestnik RUDN. International Relations*, 22(4), 741—754. <https://doi.org/10.22363/2313-0660-2022-22-4-741-754>
- Ostrowski, M.S. (2021). Europeanism: A Historical View. *Contemporary European History*, 32 (2): Agents of Changes Families, Welfare and Democracy in Mid-to-Late Twentieth-Century Europe , May 2023 , pp. 287-304
- Ujwary-Gil, A. and Florek-Paszkowska, A. (2025). *AI, analytics and strategic decision-making*. Abingdon: Routledge
- United Nations (1951). Convention relating to the status of refugees, adopted 28 July 1951, entered into force 22 April 1954.
- Vergara, J. (2007). The History of Europe and its constituent Countries: considerations in favour of the new Europe. *Journal of Social Science Education*, 6(1), pp. 15–22. Geneva: United Nations.