

Human Migration in a Globalized Economy: Groundwork for Analyzing Alternative Scenarios

Topic: Addressing Strategic Challenges of the 21st Century: Deepening the Collaboration between Input-Output Economists and Industrial Ecologists

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The major early waves of migration of homo sapiens out of Africa, between about 200,000 to 70,000 years ago, populated all the continents except Antarctica. Since then large-scale human dispersals have sought treasure and power, to escape violence or changes in climate, to satisfy curiosity or seek a better life or simply survive. Europe's Age of Discovery established colonies, transferred significant wealth back home, and for the first time directly linked the New World with the Old. In the mid 20th century World War II, a conflict unprecedented in its geographic extent, fatalities, and war crimes, displaced millions of survivors, many stateless. Today, the number of migrants has expanded to levels not seen since that time, both from one country to another and within the same country. Observers expect the current surge in migration to further intensify in response to changes in climate over the next several decades. This expansion will further exacerbate all the other causes of migration.

International trade in goods and services is a key feature of today's global economy, and these flows are explicitly represented in input-output databases and in input-output models, in particular models based on the theory of comparative advantage. The logic of comparative advantage has historically considered the factors of production to be immobile. Recent economic studies include different qualities of land and water, as well as individual fossil fuels, metals and other minerals, in addition to labor and capital as factors of production. While land and mineral deposits are effectively fixed in place, it is time to extend the logic of these models to explain international flows of factors of production starting in particular with workers and their households. That capability will enable examining alternative scenarios about future human migration.

This paper describes an input-output economic framework that limits its initial focus to exploring what might be entailed in effectively absorbing a historic level of climate refugees and other essentially involuntary migrants someplace on the planet by the mid 21st century. This focus requires explicit attention to demographics, in particular expansion or contraction of the population with associated impacts on the age distribution and the size of the labor force and the employment requirements. This paper serves as a scoping-out exercise with three initial aims. It describes several layers of logic for international matching of potential workers with jobs within an input-output modeling framework. It addresses changes in consumption patterns, material requirements for resettlement, and associated dependence on resources. Finally it identifies major categories of data and of assumptions about the future that will be needed for an initial empirical analysis. Scenarios can explore the implications of region-specific policies on numbers and characteristics of migrants to be accepted or of international agreements.