Article

Wilfried Martens Centre for European Studies

European View
1–8

DOI: 10.1177/17816858241240595
journals.sagepub.com/home/euv
Sage

Labour migration as a solution to an ageing population?

Paul de Beer
University of Amsterdam, Amsterdam, The Netherlands

Abstract

Labour migration is often mentioned as a way to mitigate the impact of ageing in wealthy societies. This article analyses the impact of labour migration on the welfare level and old-age dependency ratio of a prosperous ageing country, the Netherlands. If labour migrants are considered to be part of the population of the host country, they only contribute to a higher welfare level if their productivity is higher than per capita GDP. If they stay permanently and form a family, their productivity will need to be higher than the average labour productivity of the incumbent workforce. Labour migrants will mitigate the rise of the old-age dependency ratio, but only if they only stay in the host country temporarily. Therefore, only selective and temporary labour migration will relieve the 'burden' of an ageing society.

Keywords

Labour migration, Ageing, Old-age dependency ratio, Welfare, Complementarity, Guest workers

Introduction[1]

Recently the World Bank made a plea for migration. Several section titles in its World Development Report 2023, entitled *Migrants, Refugees, and Societies*, leave little room for doubt about the main message: 'Migration is increasingly necessary for countries at all income levels' (World Bank 2023, 2) and 'When the match [between the skills of migrants and the needs of the host country] is strong, the gains are large' (World Bank

Corresponding author:
Paul de Beer, AIAS–HSI, University of Amsterdam, Nieuwe Achtergracht 166, NL-1018 WV Amsterdam, The Netherlands.
Email: p.t.debeer@uva.nl

2023, 7). The World Bank's position on migration is primarily inspired by the diverging demographic trends in (potential) host countries and countries of origin. Whereas most (potential) sending countries have a young and growing population with a classic pyramidical age composition, most host countries have an ageing population and a shrinking, or at best stable, labour force, thus inverting the population pyramid. The migration of young people from the former to the latter group of countries therefore rebalances the age structure in both groups and, consequently, will benefit both the sending and the receiving countries.

Despite being framed as positive by the World Bank, international migration causes a lot of discomfort and discontent among the populations of the many receiving countries. The rise in immigration is considered to be one of the driving forces behind the growing electoral support for populist and radical right-wing parties (Ferrari 2021; Shehaj et al. 2019).

This article scrutinises the argument of the World Bank from the perspective of a prosperous receiving country. The theoretical arguments apply similarly to all ageing high-income host countries, but my numerical examples and calculations will be based on one specific case, the Netherlands.

The World Bank bases its positive assessment of migration primarily on its economic benefits. Therefore, I will limit myself in this article to labour migration, that is, migrants for whom work is the main motive for migrating. Policies regarding refugees, study migrants and family migrants are not primarily (or even at all) based on economic arguments and thus require taking a broader perspective than one that is purely economic. Nevertheless, all migrants are potential workers, so if an asylum seeker or a foreign student enters the labour market of the host country, his or her economic impact is similar to that of a labour migrant.

For individual countries, there is no fundamental difference between the impact of an inflow of migrants from within the EU and that of migrants entering from outside the EU. I will therefore not distinguish between the two groups. However, from a European perspective there is a big difference, since intra-EU migration does not enlarge the total working-age population. I will return to this point at the end of the article.

In line with the analysis of the World Bank, I analyse the effects of labour migration from the perspective of an ageing society. As a result of the ageing population and a low fertility rate (around 1.5 children per woman in the EU; Eurostat 2023), the working-age population of many countries has stopped or will stop growing in the near future, while the population above retirement age will increase sharply. This demographic trend raises questions about the sustainability of welfare and public services. Labour migration is often cited as a means of securing both future prosperity and the provision of public services.

I explore whether and under what conditions this could be the case. I first discuss the contribution of labour migrants to the welfare level and then the effects of labour migration on the sustainability of public provisions.

The impact of labour migration on the welfare level

From a standard economic perspective, everyone benefits from the arrival of migrant workers (Borjas 2013; Portes 2019). The migrants themselves, of course, benefit from earning more in the host country than in their country of origin. Employers benefit by filling vacancies for which they would otherwise have difficulty finding staff. And the population of the host country also benefits, because, thanks to the labour migrants' work, goods and services become cheaper.

Somewhat more sophisticated economic analyses, however, show that all or most of these welfare gains fall to the migrant worker and the employer. The benefit to the settled population of the host country is less clear-cut and generally small (Borjas 2016).

The effects for the incumbent population depend strongly on the specific characteristics of the migrants and the work they do. A migrant who is recruited for low-paid work enlarges the labour supply at the lower end of the labour market, putting pressure on wages. This may harm incumbent workers who also do low-paid work. Research shows that there is little risk of incumbent workers losing their jobs due to replacement by labour migrants, but that labour migration can negatively affect their wages (Borjas 2016).

Even if migrant workers earn more in the host country than in their country of origin, the average welfare level in the host country may still drop. As is common in economic analyses, I interpret welfare as per capita GDP. Although migrant workers increase GDP and thus contribute to economic growth, per capita GDP does not necessarily grow, since migrants also increase the population. If the contribution to the economy is smaller than the increase in population, per capita GDP falls. This is the case if the (added) value of the migrant's production is lower than the average GDP per capita. In the Netherlands GDP per capita amounted to €54,500 in 2022.

A crucial assumption in this reasoning is that the labour migrant is considered a member of the host country's population. This differs from the assumption in the standard economic analysis which concludes that migration is a win–win situation. For example, Portes (2019, Chapter 3, section: 'Jobs and wage') states: 'GDP—and more importantly, GDP per capita, or income per head, for the *existing* population—will increase' (italics added). But 'existing population' means that the migrants are excluded from this calculation. In the short term this may seem reasonable: we are interested in the effects of labour migration on the current population of the host country. But in the long term, it means that when calculating the prosperity of a country all inhabitants whose ancestors were immigrants would be excluded. This is clearly absurd.

Based on this premise, migrant workers whose work in the host country yields less than the average per capita GDP actually lower the average welfare level. If the number of labour migrants doing low-productivity work steadily increases, this results in a gradual impoverishment of the population of the host country.

The positive side of this is that labour migrants who produce more than the per capita GDP increase the average welfare level. However, there are two caveats to this. First, this is only true as long as they work and do not form families in the host country. From a purely economic perspective, the host country benefits most from labour migrants who stay there only as long as they work and do not form families or bring them over from their country of origin. Effectively, we are therefore talking about temporary or circular migrants who come to the host country to work for months or at the most a few years and then return home. The longer migrants stay, the more likely it is that they or their family members (partner, children) will make use of the public provisions of the host country, such as education, care, pensions or social benefits. Their net contribution to the economy in proportion to their contribution to the population size then diminishes. If the career and family formation paths of labour migrants are similar to those of residents, they will only contribute to a higher level of welfare in the longer term if they are more productive than the average incumbent worker (whose productivity is higher than the per capita GDP since not all inhabitants work). In the Netherlands, this would mean a productivity of more than €94,000 per year in 2022. These migrant workers would therefore most likely be overwhelmingly highly educated.

Labour migrants can also increase welfare in the host country if their knowledge and skills are complementary to those of the incumbent working population. Complementarity means that the migrants' knowledge and skills are in short supply in the host country and by providing them, migrants contribute to the productivity of the incumbent working population. This may, for example, be the case for foreign technicians with specialist knowledge that is lacking in the host country, or for specialist nurses who can increase the (bed or surgical) capacity of hospitals if there are staff shortages. Complementary migrant workers increase welfare by improving the average productivity of the incumbent workers (Borjas 2016).

Migrant workers doing low-productivity work can also complement incumbent workers, for example by providing low-cost personal services, enabling highly skilled workers to devote more time to their work. Examples might be cleaning work, parcel delivery, household chores, catering services and dog-walking services. Whether, on balance, migrants doing these jobs increase average welfare depends on whether the negative effect of the migrant worker's low productivity is sufficiently offset by the higher productivity of the workers using those services. Little can be said about this in general terms.

The second caveat is that, even if labour migrants increase per capita GDP, it still matters who benefits from this. If migrant workers are highly productive but not complementary, the employer and the migrant workers themselves benefit most. If migrant workers have complementary knowledge and/or skills, the incumbent workers whom the migrant workers complement also benefit. After all, their productivity increases, which usually translates into higher pay. In most cases, it will be highly educated workers who cooperate with labour migrants. Lower-skilled workers will often not benefit from such migration, but, equally, will not suffer from it either. Nevertheless, such migration increases the inequality between those in the incumbent population who are highly educated and those who are less educated.

Mitigating the rise of the old-age dependency ratio

Due to the ageing of the population, the costs of the public provisions that are mainly used by elderly people, in particular pensions and (health) care, will rise sharply in most countries over the coming decades. The financial sustainability of these provisions can be expressed by the 'old-age dependency ratio' (OECD 2023; Eurostat 2018). This is the ratio (expressed as a percentage) of the number of pensioners to the working-age population. Usually, the working-age population is equated with those aged between 20 and 64 (OECD 2023; Eurostat 2018). However, in view of the affordability of public provisions, it is better to use the statutory retirement age as the upper age limit. In the Netherlands, this is currently 67 years (as of 1 January 2024). The old-age dependency ratio using this upper limit is 29%: for every 10 people aged 20 to 66, there are just under 3 pensioners aged 67 and over. According to the latest population forecast from Statistics Netherlands, the old-age dependency ratio will reach its peak in 2041 at 40%. There will then be 4 pensioners for every 10 people of working age. After that, the old-age dependency ratio will largely stabilise. As a consequence, the tax burden needed to finance provisions for the elderly could increase by more than a third (up to 40% from 29%).

Labour migration can slow down the rise in the old-age dependency ratio because it enlarges the working-age population. For the Netherlands, an additional 50,000 labour immigrants per year (about 0.5% of the working-age population) would moderate the old-age dependency ratio by three percentage points in 2040, that is, it would be 37% instead of 40%. Similar calculations could be made for other countries. In general, an inflow of immigrants by a factor of m of the working-age population will reduce the old-age dependency ratio by a factor of $m/(1+m)$.

Stabilising the old-age dependency ratio in the Netherlands at the current level would require more than 3 times as many labour migrants, that is, 150,000 to 180,000 per year, and a total of some 3 million labour migrants by 2040 (17% of the current population). This is not a realistic option. Thus, labour migration will slow down the rise of the old-age dependency ratio, but it will certainly not prevent it from happening.

An important caveat here is that migrant workers only reduce the old-age dependency ratio as long as they do not also retire. If labour migrants settle permanently in the host country, they will actually increase the old-age dependency ratio in the long run when they reach retirement age. Permanent migrants will simply shift the rise of the old-age dependency ratio into the future. From the perspective of financing public services, temporary migrants are therefore most beneficial.

However, one should bear in mind that these temporary labour migrants will have to be replaced by others when they leave. Suppose that we want to increase by 50,000 the annual number of labour migrants, who stay, on average, for three years. After three years, 100,000 additional labour migrants will need to be recruited, namely 50,000 to increase the labour force and 50,000 to replace the labour migrants who leave. After another three years, this will be 150,000 labour migrants, and so on. To speed up the growth of the labour force through the attraction of temporary labour migrants, ever more labour migrants will have to be recruited. This is not realistic. Therefore, temporary labour migration can only *temporarily* slow down the rise of the old-age dependency ratio.

Conclusion: the contribution of selective and temporary labour migration

Ageing populations will pose major challenges to many prosperous countries in the coming decades. According to some, including the World Bank, (more) labour migration is inevitable to meet these challenges. In this article, I have shown that labour migration will only alleviate the consequences of an ageing population under strict conditions. Moreover, it is certainly not *the* solution to ageing populations. Consequently, the argument of the World Bank should be seriously qualified.

Only selective and temporary labour migration will mitigate the impact of ageing populations. This migration should be selective in the sense that labour migrants are only recruited for highly productive work and/or to complement the incumbent labour force. Only then will they contribute to a higher level of welfare and be relatively unlikely to make (disproportionate) demands on public provisions.

The possibility of selecting labour migrants from within the EU is limited due to the free movement of people. Policies are needed to discourage less-productive and low-paid intra-EU labour migration. These could include improving minimum pay standards (i.e. introducing a minimum wage), working conditions and housing, alongside strict monitoring and enforcement of these by labour inspectorates.

In the long term, temporary or circular labour migration is preferable to permanent migration. This will prevent migrants from becoming a burden on the public purse when they retire or when they or their family members make use of public services. However, the temporariness of labour migration can only be controlled to a limited extent. On top of this, much greater effort is required to recruit migrants for temporary labour migration. Over the past two decades, an almost inexhaustible reservoir of Central and Eastern European workers has seemed willing to come to work in the ‘old’ EU member states. In the future, however, this is much less likely, since wages in these countries are rapidly rising and their populations are ageing even more quickly than in most Western European countries (European Commission 2019).

Furthermore, countries such as Poland and Romania are themselves increasingly recruiting labour from outside the EU. It is likely that Western European countries will also have to seek more labour migrants from outside the EU in the future. This does have the advantage that these countries will be better able to select labour migrants for specific jobs and will also be able to issue permits allowing only temporary residence.

Finally, the possible positive effects of selective labour migration on the welfare level and the sustainability of the welfare state must be weighed against the non-economic consequences. Labour migration should be assessed from a broader perspective of welfare than simply per capita GDP. It should include issues such as the social and ecological effects of migration and the availability of housing, not only now, but also in the future. In general, the economic benefits of labour migration will have to be large to sufficiently offset the negative non-economic effects.

Note

1. This article is based on an exploratory study by The Netherlands, Advisory Council on Migration (2023).

References

Borjas, G. J. (2013). *Labor economics*. New York: McGraw-Hill (6th edn.).

Borjas, G. J. (2016). *We wanted workers. Unraveling the immigration narrative*. New York: W. W. Norton & Company.

European Commission. (2019). *Demographic scenarios for the EU. Migration, population and education*. Luxembourg: Publications Office of the European Union.

Eurostat. (2018). Old-age dependency ratio. *Statistics explained: Glossary*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Old-age_dependency_ratio. Accessed 8 February 2024.

Eurostat. (2023). Fertility indicators. 21 December. https://ec.europa.Eu/eurostat/databrowser/view/demo_find__custom_9539794/default/table?lang=en. Accessed 8 February 2024.

Ferrari, D. (2021). Perceptions, resentment, economic distress, and support for right-wing populist parties in Europe. *Politics and Governance*, *9*(3), 274–87.

OECD. (2024). Old-age dependency ratio (indicator). https://data.oecd.org/pop/old-age-dependency-ratio.htm. Accessed 8 February 2024.

Portes, J. (2019). *What do we know and what should we do about immigration?* Thousand Oaks, CA: Sage. Kindle.

Shehaj, A., Shin, A. J., & Inglehart, R. (2019). Immigration and right-wing populism: An origin story. *Politics, Public Administration & International Relations*, *27*(2), 282–93.

The Netherlands, Advisory Council on Migration. (2023). *Arbeidsmigratie: oplossing voor economie en demografie?* [Labour migration: A solution for economy and demography?]. The Hague. https://www.adviesraadmigratie.nl/binaries/adviesraadmigratie/documenten/publicaties/2023/12/11/verkenning-arbeidsmigratie-oplossing-voor-economie-en-demografie/Arbeidsmigratie_Oplossing_voor_economie_en_demografie_Verkenning_Adviesraad_Migratie_122023.pdf. Accessed 8 February 2024.

World Bank. (2023). *World development report 2023: Migrants, refugees, and societies*. Washington, DC.

Author biography

Paul de Beer *is Henri Polak Professor of Industrial Relations at the University of Amsterdam and affiliated with the Amsterdam Institute for Advanced Labour Studies – Hugo Sinzheimer Institute (AIAS–HSI). He is also director of the Scientific Bureau for the Dutch trade union movement, De Burcht, and an expert for the Dutch Advisory Council on Migration*.