

**Summary**  
**Labour migration:**  
**Solution for economy**  
**and demographics?**

**Exploratory  
study**



*Advisory Council  
on Migration*

## Summary

In debates on whether labour migration is a solution for ageing societies, three issues intertwine. The first is the sustainability of the welfare state in view of the growing number of pensioners compared to the number of active people, the 'old-age dependency ratio'. The second are structural labour shortages as the number of workers retiring is larger than the number of young people entering the labour market. The third is maintaining the level of welfare, measured as per capita gross domestic product (GDP).

The aim of this exploratory study is to calculate the potential contribution of labour migration to mitigating the impact of demographic changes on these three issues in the coming decades. Specifically, it addresses the question to what extent labour migration can moderate the increase in the old-age dependency ratio (the ratio of retirees to active people), can increase the size of the (potential) labour force and can help maintain the welfare level (per capita GDP). The potential impact of labour migration is compared with the impact of other options to increase the labour force, in particular a gradual increase in the statutory retirement age.

To determine the impact of labour migration, we calculated the effects of a net increase of labour immigration to the Netherlands by 50,000 persons annually (*net* means the difference between the number of labour migrants arriving and the number leaving). The number of 50,000 corresponds to 0.5 percent of the current population of working age and has been chosen for purely illustrative reasons. We calculate the effects in the short term (the coming years), in the medium (up to 2040) as well as in the long term (up to 2070). The middle variant of the population forecast of Statistics Netherlands (CBS) until the year 2070 is used as a reference scenario. Since this forecast already includes a net migration of around 50,000 persons (including asylum seekers, study migrants and family migration), our study adds 50,000 persons of working age to this scenario. Since we focus on the effect of *additional* labour migrants, our conclusions would not be substantially different if we started from a different reference scenario.

To be as clear as possible about the impact of 50,000 extra labour migrants *per se*, we make a number of simplifying assumptions. First, we assume that the extra migrants stay in the Netherlands temporarily and return to their country of origin before reaching retirement age.<sup>1</sup> We also assume that they do not bring over a partner from abroad and do not have children in the Netherlands. Initially, we also assume that the productivity of the labour migrants is comparable to that of the

---

<sup>1</sup> In fact, this means that the number of additional migrant workers arriving in the Netherlands is increasing every year as they also replace the (growing) group of migrant workers who return to their home country.

average Dutch worker. These assumptions do not express our preference or normative judgement, but are purely chosen for the clarity of the calculations. Migrants coming to work in the Netherlands have the right to family formation. Nor do we express a preference for temporary or circular migration. In the first instance, we make this assumption only to show as best as possible the effect of labour migration *as such*, apart from possible indirect effects. Next, we discuss what the consequences are if we drop these assumptions: if migrants settle permanently in the Netherlands and form families here and eventually retire, if we assume a number other than 50,000 additional labour migrants and if we assume that migrants perform less or more productive work than the average working person in the Netherlands. We also briefly discuss the academic literature on possible indirect effects on the labour market and the economy. These effects can only be analysed with a sophisticated economic-demographic model, which is beyond the scope of this exploratory study.

### **Old-age dependency ratio**

Ageing increases the so-called old-age dependency ratio: the ratio between the number of pensioners and the working-age population (20 years to retirement age). This puts pressure on the affordability of the welfare state as a relatively smaller group of working people has to finance the services used by a growing group of elderly people (care, pensions). Assuming a retirement age of 67 (from 2024 onwards), the old-age dependency ratio is expected to rise from 29 per cent now to 41 per cent in 2041 before falling slightly to just over 39 per cent in 2055 and then rising again to 43 per cent in 2070. The surge in old-age dependency ratio is caused by the two age groups in the current Dutch population that are the largest: 50- to 64-year-olds, who will reach age 67 in the period up to 2040, and 20- to 35-year-olds, who will reach 67 from 2055.

If an additional 50,000 migrants arrive in the Netherlands each year, this will have the same effect on the old-age dependency ratio as the gradual increase in the statutory retirement age,<sup>2</sup> as currently envisaged, to 68 in 2039 and 69 in 2052. See figure 1. The old-age dependency ratio will then be about 3 percentage points lower in 2040 and about 7 percentage points lower in 2070 than it would be without additional labour migrants or without raising the retirement age. Nevertheless, even in that case, the old-age dependency ratio will be about 8 percentage points higher in 2040 than it is today and 6 percentage points higher in 2070. To stabilise the old-age dependency ratio at current levels, more than 150,000 net additional labour migrants would be needed annually up to 2030, and almost 180,000 annually between 2030 and 2040. Until 2040, a total of almost three million additional labour migrants would then have to come to the Netherlands.

---

<sup>2</sup> Which is linked to life expectancy.

Figure 1: Old-age dependency ratio in four scenarios



Source: Own calculation based on data from Statistics Netherlands (Statline)

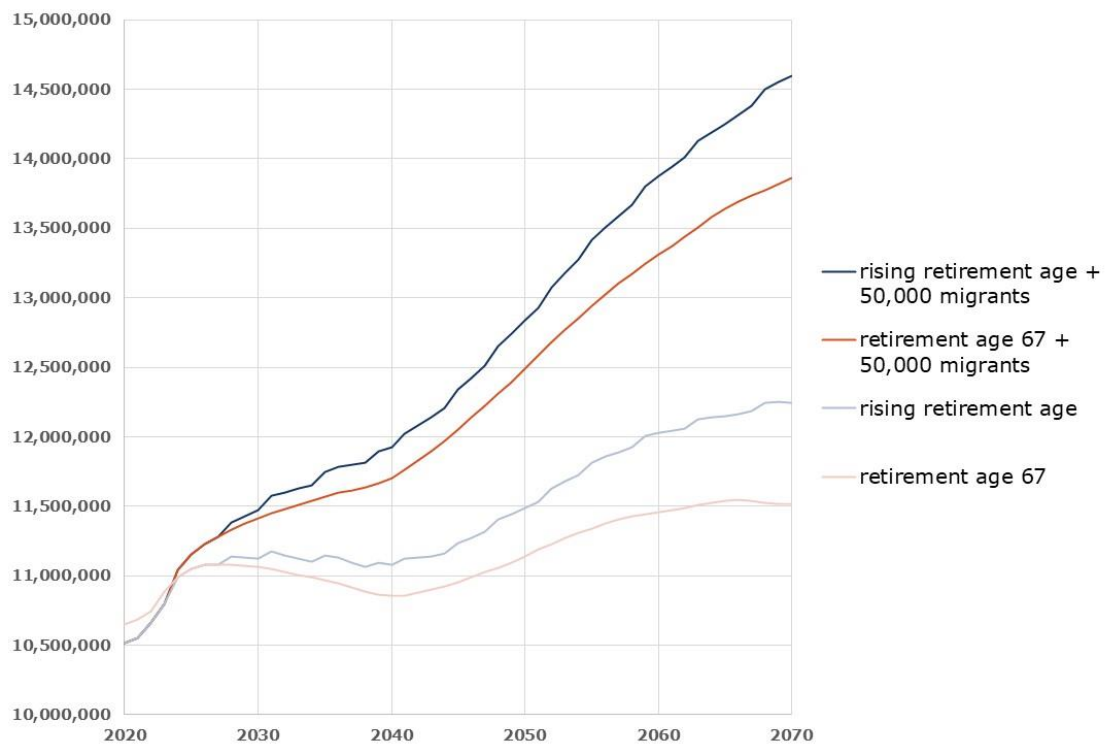
A crucial assumption of these calculations is that the additional migrants stay in the Netherlands temporarily – i.e., they are circular migrants – and do not form families in the Netherlands. We assume they will leave the Netherlands again before reaching the retirement age and relying on public provisions, such as (health)care and old-age pensions. In case of permanent labour migrants who form families in the Netherlands and retire at some point in time, their children are expected to further reduce the old-age dependency ratio from the second half of the 2040s onwards as they join the (potential) labour force. From the 2060s, however, the old-age dependency ratio will rise more sharply again as the migrant workers retire. In the longer term, this will push the old-age dependency ratio higher than in case of temporary labour migrants. In other words, with permanent labour migration, more and more labour migrants will have to be attracted in the long run to reduce the old-age dependency ratio.

What would be the consequences if, on balance, no more labour migrants came to the Netherlands? If we assume that from 2024 net labour migration is zero, i.e. as many labour migrants leave as arrive, the old-age dependency ratio would then increase to almost 54 per cent in 2070 if the retirement age remains constant at 67 years. If the retirement age gradually increases, the rise of the old-age dependency ratio will be limited to 43 per cent.

## Staff shortages and labour force

Labour migration is often mentioned as a solution for a contracting labour force and increasing staff shortages. An additional net 50,000 labour migrants per year will increase the potential labour force by half a million persons or 5 per cent every 10 years. While the potential labour force aged 20-67 will stagnate between 2023 and 2040 in the CBS's population forecast, it will still increase by about 900,000 persons in case of 50,000 additional labour migrants per year. See figure 2. This greatly reduces the risk of structural labour shortages during this period. After 2040, however, the potential labour force is expected to continue to grow even without additional labour migration. At half or one-and-a-half times the number of additional labour migrants (25,000 or 75,000 per year, respectively), the impact on the potential labour force will also be half or one-and-a-half times larger.

Figure 2: Potential labour force in four scenarios



Source: Own calculation based on data from Statistics Netherlands (Statline)

The impact of 50,000 additional labour migrants per year on the size of the potential labour force will be three times larger than the gradual increase in the statutory retirement age. The effect of 50,000 labour migrants is also comparable to an annual 10-minute extension of average working hours; in 2040 this would imply an average working week of almost three hours longer than in 2023.

Labour shortages are not only related to the size of the labour force as a whole, but also to specific staff shortages in particular occupations and sectors. In part, these are caused by work not being attractive enough for the incumbent labour

force. If migrant workers are attracted for this purpose, the incentive for employers to improve the quality of work (terms of employment, working conditions) is removed. Partly specific staff shortages are caused by a lack of qualified workers in the Netherlands have the required qualifications and skills. In essential sectors, such as care and education, this can jeopardize the level and quality of public provisions. Improving terms and conditions of employment may eventually lead to additional qualified domestic supply, as more young people opt for an education in the relevant direction. In the short to medium term, attracting qualified workers from abroad can also meet this staffing need.

### **Welfare growth**

By definition, labour migrants contribute to economic growth when they enter the Netherlands to perform productive work. However, labour migrants also increase the population. As a result, labour migrants increase the welfare level, measured as *per capita* gross domestic product (GDP), much less than economic growth. If the productivity of migrant workers on average matches that of established workers, 50,000 additional migrant workers per year will increase the welfare level by about a quarter of a percentage point per year. However, if migrant workers perform low-productive work in the Netherlands, the average welfare level may even fall. This is the case if their contribution to GDP growth is smaller than their contribution to population growth. For example, a migrant worker who starts working as a parcel delivery person is more likely to reduce the average welfare level than increase it. In contrast, migrant workers recruited for high-productivity work will make a greater contribution to average welfare levels.

Migrant workers also contribute positively to the welfare level if their talents and skills complement those of incumbent workers, whose productivity is also raised as a result. This applies especially to specialised positions for which qualified supply is lacking in the Netherlands.

The effect of labour migrants on the welfare level varies with the stage of life at which they come to the Netherlands, whether they form a family in the Netherlands and whether and, if so, when they leave. The more the life course of labour migrants in the Netherlands resembles that of settled residents, the smaller the contribution to welfare in the longer term will be. After all, labour migrants will then eventually also retire and use (care) facilities and education for their children.

Finally, there are important distributional issues. In general, migrants themselves and the companies that employ them benefit the most from their arrival. In many cases, higher-educated established workers also benefit. Lower or practically educated people in the Netherlands will usually benefit the least.