

DISCUSSION PAPER SERIES

IZA DP No. 16987

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Population Growth in the Netherlands**

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*University of Amsterdam and IZA*

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## ABSTRACT

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# The Dire Consequences of Untamed Population Growth in the Netherlands\*

In the postwar period, when fertility dropped substantially, immigration more than made up for the drop in population growth, and from 1950 to 2020, population increased by 73%, double the European rate, in a country with population density already among the highest in Europe. Yet, there never has been a serious population policy, and in fact, central spatial planning has been abandoned. In regard to effects on population size, it seems like immigration policies were set by a sorcerer's apprentice who only half mastered his art: he could set forces in motion, but controlling them afterwards was beyond his skills. As a result, Dutch policy making touching on alternative uses of land, has now reached a stalemate. We discuss some options for a way out.

**JEL Classification:** J10, J11, J18

**Keywords:** population size, population density, immigration, immigration policies, spatial planning

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\* This paper is based on Hartog (2023); further details and arguments can be found there.

## *1. History of migration and migration policies*

Population in the Netherlands doubled between 1500 and 1650, stabilised at just under 2 million until 1800 and then began uninterrupted, and sometimes very substantial, growth. In broad summary, the Netherlands was a net immigration country between 1500 and 1800, and a net emigration country during the 19th century. During the first three quarters of the 20th century, net migration was essentially zero. In the last quarter of that century, net immigration became substantial.

In the first decade after the Second World War there was initially substantial emigration. In the same period, immigration started, initially limited numbers of skilled workers, later a large flow of unskilled labour from Mediterranean countries. The Ministry of Justice opposed the inflow from the start, and insisted on restrictions, officials at Social Affairs, responsible for employment services, facilitated the influx. Politics and legislation had little influence, formally necessary work permits were easily issued and renewed. When excess demand disappeared in the seventies, immigration turned out to be permanent instead of temporary, initially prohibited family migration was allowed and the immigrants received domestic political support on social and moral grounds. Policy research and government-funded research also focused almost exclusively on the interests of immigrants. Asylum migration developed strongly from the mid-1980s, on the basis of international treaties, and supported by jurisdiction and specialists in asylum law in academia and in practice. The opening up of the labour market in the expanding EU after 2000 has led to a substantial increase in net immigration, particularly from the central and eastern European new member states. Since then, immigration beyond the Dutch policy realm (EU and asylum) has accounted for the largest share of (net) immigration. Immigration within that realm (labour migration from outside the EU) is decentralised to "referees"; for highly skilled migrants, only a salary criterion applies.

Immigrants have thus first been embraced by the civil servants of Social Affairs, then by the House of Representatives and socially engaged socio-cultural academics, and then by Members of the European Parliament, judges and lawyers. Initially, the law was hardly enforced and used flexibly, later judges and lawyers forced the government to order. The process of juridification has revealed implications of national and international law that were often neither foreseen nor intended. Often, actors were not aware of the destination of a chosen path. Policy objectives have rarely been formulated clearly and unambiguously, and testing the results is even more difficult. But the nexus objective-instruments-results does define a useful framework of analysis.

The objective of Mediterranean immigration that began with the recruitment agreements in 1955 and ended with the deployment of more restrictive admission policies in 1976 was to preserve employment and promote exports through low wages. The period of wage moderation ended with the so-called wage explosion of 1964, by the end of the 1970s it became clear that production had become more capital intensive and that an economic restructuring was under

way with a phasing out of traditional industries such as shipbuilding and textiles. The resulting high unemployment disproportionately affected immigrants. It is difficult to determine what immigration contributed to the successful reconstruction after the Second World War and the high economic growth. It is certainly not inconceivable that immigration has contributed to a slowdown in the transition to higher capital intensity and a production structure with more services and less manufacturing. But that certainly would not have meant that immigration contributed to the growth of labour productivity and per capita income.

Family reunification and family formation, the dominant motive among immigrants in the post-Mediterranean labour migration period, was not an instrument of an economic objective. The policy on family migration was inspired by moral considerations and considerations of solidarity, freedom and equality. It was not intended to contribute to the income and material wealth of residents, nor will it have made an actual contribution. The costs of that policy must therefore be offset by those intangible benefits. This is clearly assessed differently by different segments of the population; it is also clear that negative judgments have greatly increased over time.

The above is even more true in the case of asylum migration, which has increased sharply since the 1980s. The pure justification for admitting asylum migrants is the interest of the asylum seeker. Purity has certainly been diluted with Dutch self-interest in the past (as in the selection of Hungarian and Czech refugees after uprisings against Russian rule), but formally excluded by the Refugee Convention. The costs of asylum migration must therefore also be judged against the intangible humanitarian benefits.

Labour migration from outside the EU, in particular of knowledge workers, is explicitly economically motivated as a contribution to the innovativeness and competitiveness of the Dutch economy. The criterion for this is merely a salary threshold, obviously a crude and imperfect measure, and certainly not based on an examination of the relationship between target variable and indicator. The economic literature is sceptical about the contribution of migrant workers to the income of already established residents.

Migration movements in the open European labour market cannot be judged solely on economic measures. The European Union was set up to promote peaceful European coexistence. It is, of course, pointless to seek to determine the contribution of free European labour mobility to European peace. But given history, say since the Napoleonic devastation, the Franco-Prussian War, WWI and WWII, Balkan wars and all kinds of other skirmishes between states and for the formation of nation states, the original objective should not be forgotten lightly and is also an objective with enormous economic value at stake. An interesting question is also to what extent there will be economic convergence within the Union and how long it will take. Labour mobility from Italy, Spain and Portugal has fallen sharply after those countries became part of the European Community.

A conflict of immigration with other policy objectives has often been neglected or deliberately obscured. Population growth in a country that has always been perceived as densely populated,

if not overpopulated, has often been denounced but has never led to targeted slowing down: during excess demand in the labour market, a limit was never set on the basis of population density, during excess supply it was an easily used argument for curbing immigration. The Highly Skilled Migrant Scheme is completely open, any immigrant who is offered a salary above the threshold is welcome. There is simply no population policy, it only existed briefly in the post-war period as a promotion of emigration (while at the same time an immigration policy was developed). Temporary immigration is also often professed as a means of controlling immigration flows, but explicitly formulated boundaries have always been excluded from the law. Required minimum residence periods for free access to the labour market and for permanent residence permits have regularly been ignored.

The Aliens Acts of 1849 and 1965 explicitly exclude immigrants who posed a threat to public peace. Long before the Aliens Act 2000 (which no longer mentioned this criterion), social unrest had already arisen, not so much about individual immigrants as about the extent of immigration. This unrest, as an infringement on social cohesion and harmony, was foreseen in 1969 by the Minister of Justice Polak, who, in a meeting of the Council of Ministers on a Memorandum on Foreign Workers, expressed his reservations: "The increasing number and variety of foreign workers worries me somewhat. (.) As the amount of foreign workers increases, the number of stayers and their families grows at the same time. They come from increasingly remote countries (Yugoslavia, Turkey, Morocco in particular). This would mean that integration would be increasingly slow. Thus, a social problem can grow, from which later generations would reap the bitter fruits." (quoted in De Lange (2007), 130). That concern has been dismissed, as the primacy for immigration policy did not reside with Justice where it would have belonged as the guardian of the borders.

The spirit of the Aliens Laws, codification of age-old norms, "no paupers, no rioters", has certainly not been respected. By nature, communities tend to protect their achievements. "No paupers, no rioters", a direct consequence of that attitude, can already be recognized in the actions of governments in the Middle Ages, is clearly stated in the Aliens Act 1849 (sufficient means of subsistence, no danger to public peace) and just as clear and prominent in the Aliens Act 2000 (sufficient resources for the costs of residence, no danger to public order or national security). Clearly, realisation of this explicit objective is not immediately obvious. In 2019, 2.4 percent of residents with a non-western migration background were suspected of a crime. The share of suspects among the population with a western migration background was 1.0 percent, and for a Dutch background 0.7 percent.<sup>1</sup> The social benefits take-up of non-western immigrants is significantly higher than that of native Dutch.<sup>2</sup> But the opposite of selection for

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<sup>1</sup> <https://www.cbs.nl/nl-nl/dossier/dossier-asiel-migratie-en-integratie/hoer-verschillen-veiligheid-en-criminaliteit-naar-migratieachtergrond->

To control for personal characteristics, see file:///C:/Users/Beheerder/Downloads/wrr-policy-brief-web-geen-tijd-verliezen-04%20(1).pdf

<sup>2</sup> "Among people with a non-western background, the benefit dependency is significantly higher. In the case of the children of immigrants, the so-called second generation, significant improvements compared to their parents in terms of benefit dependency are visible. However, almost all ethnic groups are still more likely to need a benefit to support themselves than people with a Dutch background. People with a non-western background are less likely to have a job than people with a Dutch or new EU background." *CBS Jaarrapport Integratie 2018*.

self-interest, care for the needy, is just as old: charity in the Middle Ages as a Christian duty, admission as a refugee or on humanitarian grounds in recent legislation. Thus, the tension between the humanitarian and the egoistic argument is also centuries old.

Labour market equilibrium has only become a legal criterion in the twentieth century, but the situation on the labour market has of course always been a determining criterion for attitudes towards foreigners. Guilds had a firm grip on the market for skilled craftsmen and could decide on the admission of foreigners, from the 17th to late 19th century large groups of seasonal workers came from Germany to work in agriculture, infrastructure and industries such as bleachers and brick factories because domestic supply was insufficient.<sup>3</sup>

So there's an interesting dynamic in the development of immigration policy. The great post-war immigration begins with labour migration. The Ministry of Social Affairs is the great advocate of this. Their power rests on authority over the work permit, although admission policy, under the Aliens Acts, is the competence of Justice. The division of powers causes a constant struggle, in which Social Affairs represents the employer's interests and Justice without success tries to slow down immigration on considerations of social peace and cohesion. For several decades, this battle has taken place behind closed doors, between civil servants. After initial blockade, family migration is allowed, with the support of the House of Representatives in a more public debate and with the support of idealistically motivated socio-cultural academics but against the explicit wishes of the Justice Department. The exclusive authority over immigration policy that Justice had lost in 1934 has only been regained in 2014 with the Modern Migration Policy Act, but then over a shrunken domain. International treaties, such as the EU, human rights treaties and the Refugee Convention, initiated without public attention for possible far reaching consequences for migration flows, are gaining increasing influence through a process of juridification in which judges, practical and academic lawyers, and idealistic organisations use legislation to strengthen the position of immigrants, in particular that of asylum seekers. Whereas civil servants and politicians used to be autonomous in their dealings with laws and regulations, now laws are being scrutinised and tested for their implications in favour of immigrants. Public opinion plays a curious role in this process: in distressing individual cases obvious support for the weak emerges, while immigration in general is strongly opposed by large segments of the population.

## *2. The upshot: strong population growth since 1950*

From 1950 to 2020 Dutch population grew by 73%. For all of Europe, population growth amounted to 36%; it stood at 34% in Belgium, 54% in France, 37% in Denmark, 33% in the UK and 47% in Sweden.<sup>4</sup> The exceptional Dutch growth rate occurred in a country that had already very high population density in 1950, at 300 per square kilometer, while the European average stood at 25, at 284 for Belgium, 76 for France, 100 for Denmark, 206 for the UK and at 17 for Sweden.<sup>5</sup>

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<sup>3</sup> De Vries en Van der Woude (1995).

<sup>4</sup> Data source: [PopulationPyramid.net](https://www.populationpyramid.net); 20/09/2023

<sup>5</sup> Data source: [database.earth](https://www.database.earth); 20/09/2023

Effects of a nation's population size on income per capita are slight at best, and interact with openness to international trade. For the Netherlands the joint effect works out to constant returns to scale. The effects of immigration on level and growth of income per capita are also negligible; redistribution effects tend to be larger. What really remains is the impact of population size on external effects and hence, on "broad welfare", and these are mostly negative: congestion, noise, ecological damage, damages to individuals' health. The negative effects of population growth have long been recognized in the Netherlands, but never carried any political weight. For the analysis leading to these conclusions, see Hartog (2023).

### *3. An assessment of the policy struggles*

Implementation of the criteria for immigration in the three-quarters of a century after the Second World War has been a constant struggle with unintended effects, as befell the sorcerer's apprentice who only half mastered his art: he could set forces in motion, but controlling them afterwards was beyond his skills. Mediterranean workers were intended to solve shortages in an overstretched labour market, but the operation got out of hand when they did not come temporarily but turned out to stay permanently. Family reunification and family formation were promoted in the name of equality, as a basic right, but proved to be an obstacle to the desired and actually expected social integration. Asylum treaties were concluded to accommodate the uprooted and the expelled of World War II, but when humanitarian compassion was expanded without borders, flows emerged that no one had anticipated. Commitment to international treaties imposed principles whose unforeseen benefits were discovered by potential immigrants and their lawyers, essentially irreversible to the national legislature.

Perhaps the tragedy lies most in the limited anticipation of the consequences of policy and legislation. Or could it have been better? Temporality of unskilled Mediterranean immigration could have been written in the law, but was prevented by a conflict of interest rather than lack of imagination. Family migration was triggered by the emergence of a broader objective than mere economic interest of Dutch natives: moral considerations and fostering the ideal of equality. The consequences for the size of the population with a migration background cannot have been unforeseen. The consequences for the integration of foreigners and for social cohesion of relaxing the rules of entry have been foreseen at the Ministry of Justice and repeatedly put forward at the highest policy level.

Opinions in society differ strongly about the most desirable attitude towards established and new immigrants. The same applies to attitudes towards asylum seekers. When the Refugee Convention was ratified, the possible extent of the refugee flows will certainly not have been foreseen. But here the question arises whether the possibilities of the treaty are sufficiently exploited. The convention prohibits sending refugees back to the hazardous areas, but does not exclude international coordination on regions for settlement. Here, the problems are caused more by political paralysis of the EU than by the nature of the treaty.

The unforeseen consequences have mainly caused a sense of powerlessness, not only among the population but also among policymakers. In a ministers' meeting in 1980, while 30,000



immigrants were pouring in, "Wiegel (Minister) of the Home Department says he thinks it is 'appalling' that 'it appears again and again that the government cannot control immigration'. State Secretary Haars of Justice replied 'that the government will not be able to do much about this, unless one would dare to delete the criterion of family reunification' (Bonjour, 2017, p 163). And as quoted above: "Minister de Vries of Social Affairs (PvdA, the Dutch labour party) speaks of a practically uncontrollable problem". Powerlessness and frustration that are rooted in irresistible pressure, from migrant workers, family migrants and asylum seekers, with limited political and legal room for maneuver, partly due to the divisions among the electorate.

The Aliens Act 1849 was very general about admission to the Netherlands and left the implementation to local government. The Aliens Employment Regulation Act 1934 was also very global and limited to granting the right to regulate work by foreigners. When immigration started in the 1950s as labour migration, Social Affairs took hold of the policy space and the work permit became the key to admission. When immigration turned out to be growing like a cuckoo cub, it was too late to reconstruct the nest and put the egg where it belonged: at the Justice Department. Justice has the task of border control and to test the means of subsistence requirement; the work permit, on the advice of Social Affairs, can be part of the assessment. It took Justice half a century to regain primacy.

Conflicting interests and divisions over objectives present major challenges to politicians and political parties that strive for maximum electoral success, and to this end try to unite voters with different views. This comes easily at the expense of honesty and transparency. For example, immigration was cheerfully declared temporary and emigration permanent, temporality was maintained against better judgment, it was long denied that the Netherlands was an immigration country, economists were kept out of the discourse with their negative conclusions about the economic importance of immigration, attention for the tax burdens of immigrants is still considered undesirable and even inappropriate.<sup>6</sup> The contradictions cause much political squabbling (and shuffling with political responsibility) and much effort of civil servants that remains without policy consequences (such as 4 memorandums on immigration policy). The endless struggle makes one thing abundantly clear: immigration cannot be interpreted as a common public interest. The battle for land, with competing claims by different segments of an expanded population, has in fact resulted in a policy stalemate.

#### 4. *What policies are conceivable?*

With claims on land adding up to more than what is available, what's the menu of measures that policy makers might choose from? Let's consider a list of options.

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<sup>6</sup> When the report *Borderless Welfare State* (Van de Beek et al, 2023), on the fiscal impact of immigrants, was first published (in Dutch), two leading national newspapers paid attention to a politically motivated ban on publication by the Board of the University of Amsterdam (essentially on "political correctness"), but not to the content of the report (large burdens of immigrants on the treasury). See *De Telegraaf*, 09-03-2021, p T8 and *NRC* 12-03-2021 p 10-11). On the other hand, two other newspapers argued for the removal of the taboo on the costs and benefits of immigration (editorial Carlijne Vos, *De Volkskrant* 4 March 2101; Sjors van Beek, *De Limburger*, 10 March 2021, p 16).

### *Increase land*

This is a policy with a long tradition in the Netherlands: reclaiming land. But more precisely, it is a change of destination, from water or moor to land within a given jurisdiction. Therefore, density is better expressed over total territory than only over land.

Turning water into land is conceivable for the Waddenzee (sea between mainland and the string of islands to the north), the territorial part of the North Sea and the lake in the center of The Netherlands (the non-reclaimed part of the former Zuiderzee). The Waddenzee is used for recreation and is protected as a unique nature reserve, listed as a Unesco World Heritage area. The central lake is used for recreation; it's also the site where new nature habitats are developed. Several visions for creating land in the North Sea have been presented (farmland, housing and recreation, nature, extension or replacement of Schiphol Airport). The North Sea has large windparks, and substantial extension of the parks is under way. This conflicts with visual experience of the wide open sea, with interests of the fishing industry, with conservation of nature and wildlife (fish and other sea life, sea birds and the large flows of birds using the North Sea as their trekking route).

### *Reduce population*

Between 1960 and 1980 fertility was cut in half, from 3.2 per woman to 1.6. This means fertility below replacement level. There is still natural growth from increasing longevity. From 1950 to 1965, the annual birth surplus was about 150 thousand, from 1982 to 2009 it stood at 50-60 thousand and then continued to drop: in 2021 it was just over 8 thousand. From 1950 to 2021, the expected duration of life at birth increased by 14%, an increase which at constant number of births would raise a population of 10 million in 1950 by 1.4 million. Sustained high levels of population growth were due to the immigration surplus. Further reduction of fertility (or just stabilisation) may eliminate natural population growth, which may create scope for an immigration surplus at zero population growth or serve to result in population decline.

In the late 1940's, under the then prevailing conditions, a high birth rate gave rise to an explicit emigration policy. There was no selectivity on skills and other qualities of the emigrants and many skilled craftsmen and farmers left. There is no good reason why we would not consider a new emigration policy. Farmers may be stimulated to move to countries with good farming opportunities, in Europe or farther away. Persons with a migration background may be interested in returning to the land of their ancestors, in particular when these countries become more prosperous (as many Italians, Spaniards and Turks did). The elderly may be stimulated to stay longer in the sunny Mediterranean areas than just a few winter months; it may lead to demand for lower housing space in the Netherlands.

Immigration can be restricted in many ways. A straightforward policy would be to make all immigration temporary. The immigrant population would then be constant if inflow and duration would be constant, e.g. at 500 000 if an annual inflow of 100 000 would stay for 5 years. The need for immigrants can be curbed by ensuring suitable domestic supply: anticipatory education policies, which ensure the high quality graduates needed for internationally competitive sectors (the Netherlands has universities of international top class),

promotion of participation in lower and secondary vocational education that provides well-trained primary and secondary executive staff in sufficient numbers, making positions with staff shortages more attractive by improving autonomy, working conditions and salary. In short, to balance the labour market internally, just as a State Commission in 1977 recommended. In this light, one can also reconsider the available specializations in education, with almost entirely free choice of study and subsidized supply that almost blindly follows the demand. It would be good to think about the influence of the subject structure of education on the structure of production instead of the reverse. The educational structure of the population will certainly have an influence on the production structure. If there are complaints all over on too many management layers, an overblown control culture and too little executive autonomy, we may have too many managers. So one might think of limiting the number of training places. Studies with too little intake (science courses, technology) can also be stimulated by limiting alternatives with too much intake. Curricula in vocational training may be reconsidered. Increases in the intellectual component in education for healthcare workers will no doubt have provided graduates with higher ambitions than providing practical care. Aiming training at a range of tasks with reflective and managerial components will reduce the supply of pure care providers. Too much broad education in primary and secondary vocational training can slow down the influx of pupils interested in practical work.

Family migration may be restricted, either directly or by restricting facilities (such as waiting time for permanent permits, strict thresholds for economic independence and limited access to welfare benefits).

For asylum seekers, much autonomy has been given away by joining the New York Protocol, which gives every persecuted person in the world the right to apply for asylum and protection against return to a region with suppression. The United States likes to present itself as a refuge for the persecuted in the world, with the famous text on the *Statute of Liberty*:

*“Give me your tired, your poor,  
Your huddled masses yearning to breathe free,  
The wretched refuse of your teeming shore.  
Send these, the homeless, tempest-tost to me,  
I lift my lamp beside the golden door”*

The US has also signed the New York Protocol. But interestingly, they have a quota for admission ("Presidential Determination") which is not surpassed by actual legal admissions. The quota peaked at 232 000 in 1980; in 1993 an intermediate peak of 142 000 was reached, after 2000 the quota did not exceed 80 000 authorisations per year. If we were to set a quota in the Netherlands for the same fraction of the population, we would be admitting 17 000 asylum seekers a year with the 1980 fraction, and no more than 5,000 applicants with the American fractions from the year 2000 onwards. The UNHCR website also reports that the procedure in the US is strict and careful, and takes 2 years. There seems to be something to learn from the US.

The Netherlands is constrained by the EU's asylum policy. Leiden lawyer Rodriguez (2010) even states that we cannot cancel the asylum treaty without leaving the EU. But the Netherlands can instead at least try to persuade the EU to a quorum like the US does. And in the absence of success, just stick to a decent self-imposed quorum. Hungary could even set a zero quorum. A middle way may be to use as a quorum a fraction of the EU inflow, based on the argument of reasonable distribution within the EU. As a weighing fraction, one can think of territory size, population size and income per capita, or a combination of the three to be chosen (combination allows weighing with population density or income per capita). This would yield shares of 1, 3.9 and 5%. In 2020, 416,860 applicants applied to the EU and 161,550 applications were granted. Equal shares per country, i.e. 1/27 each, would amount to 15439 applications and 5983 admissions for the Netherlands. If weighted by one of the three criteria, this would give the Netherlands a share between 4200 and 21 000 applications and between 1600 and 8100 admissions, weighing by inverse population density (territory per inhabitant) 4014 applications and 1556 admissions. In fact, there were 13 720 first applications and 13 615 positive decisions at first instance (NB: the decisions do not relate to the applications of the same year, because of the long processing time; there are no longitudinal data).

There are about 15 000 Dutch students studying abroad and some 85 000 foreign students in the Netherlands, a balance of about 70 000 students for whom housing and other facilities must be created.<sup>7</sup> Universities are responsible for admitting foreign students, the local government for housing. That is not a distribution that guarantees a proper consideration of costs and benefits. Reflection on the benefits of foreign students, possibly differentiated by ability, may be worthwhile.

#### *Reduce space intensity of activities*

The space requirements of a given function can be reduced in many ways. For example, high-rise buildings can be used for homes and business premises, some destinations can be placed (partly) underground (motorways and railways, functions that do not need daylight, such as cinemas and theatres, warehouses and distribution centers, parking spaces, parts of agricultural production such as mushroom farms). Space take-up does not only have to be left to the price mechanism, but can also be rationed. We have already rationing in general terms (space allocated in zoning plans for housing, businesses, agriculture, nature), but the size of homes and other buildings can be limited<sup>8</sup>, not every 2 minutes of time savings have to be realized by adjusting the road network. The need for roads can be limited by giving priority to vehicles with more than one occupant (as in some cities in the US). Parking space may be limited. The tax deduction of travel expenses can be abolished.

Space can be used multifunctionally. Work can be organized differently from gathering all staff members simultaneously in the same building; it is unclear whether that will reduce the total space for living and working, but it surely will reduce traffic. Certain forms of agriculture can be combined with the demand for open space. Combination with nature is also possible, but

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<sup>7</sup> In 2021-2022, there were 115 000 foreign students in Dutch higher education. Source: NUFFIC

<sup>8</sup> Average residential floor space per capita varies strongly, with a low of 15 m<sup>2</sup> in Hong Kong and a high of 89 m<sup>2</sup> in Australia; <https://shrinkthatfootprint.com/how-big-is-a-house/>

then strong modifications are needed to production technology. Recreation and nature can also be combined, provided that nature is really protected. The current tendency to make nature profitable through recreation is often more favourable for recreation than for nature.<sup>9</sup> Cities can be made greener.

#### *Adjusting the production structure*

Not all activity takes up the same space. Dutch agriculture has adapted to the scarcity of agricultural land with very intensive land use. That seems like a virtue in a densely populated country, but the associated production methods have caused enormous environmental damage. The tension between intensive land use and a technology with great damage to nature has risen very high. The *Raad voor de Leefomgeving en Infrastructuur* (Council for the Living Environment and Infrastructure (2022)) is highly critical of Dutch nature policy and recommends that nature policy should not be limited to protected areas, but should also be applied in all rural and urban areas.

The shift from industry to services seems to have been beneficial for the use of space. Interestingly, built-up space per capita declined between 1900 and 2000, from 337 to 301 square meters, with an intermediate level of 203 in 1950. This can be a result of urbanization, with a higher building density than a rural society.

#### *No reason to fear population decline*

The fear of population decline is widespread. While globally the current population size is already a problem and further growth is expected for the near future, individual countries with shrinking populations want to turn the tide with pro-natalist and pro-immigration policies. Pro-natalist voices are even heard in the Netherlands (Van Dalen, 2008).

Low fertility (number of children per woman) is widespread in Europe, with an average of 1.61 in the period 2015-2020. The Netherlands was close to that average, with 1.66, well below the replacement value of 2.1. In none of the European countries was fertility above 2.1 (UN World Population Prospects File FERT/4). The natural population growth rate (births minus deaths) in Europe was -0.6 promille. Contraction is mainly due to Eastern and Southern Europe, with an average of -1.4 and -2.0 promille; Northern and Western Europe grew, by 2.0 and 0.2 promille. The Netherlands grew by 1.4 promille (o.c. File POP/3). UN forecasts for the Netherlands for the rest of the century are positive for a high variant and negative for a low variant. Positive natural growth with fertility below the replacement value of 2.1 is caused by extension of longevity. Fertility for the Netherlands after 2020 is predicted in the high variant at 2.1 or higher, in the low variant on values between 1.2 and 1.3 from 2030 on. In the high variant, positive natural growth is expected for the rest of the century, in the low variant it will be negative. Statistics Netherlands expects the population to grow from 17.4 to 19.3 million from 2019 to 2050, mainly as a result of immigration. But the margins of uncertainty are large,

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<sup>9</sup> See for example *Verstoring van vogels door recreatie*, <https://www.vogelbescherming.nl/actueel/bericht/verstoring-van-vogels-door-recreatie> (Disturbing birds by recreation).

especially on migration: the 7 variants include both strong growth and contraction. Predictions spanning a whole or half a century are inevitably riddled with great uncertainty. But the chance of permanently low fertility, somewhat compensated by increasing longevity, resulting in negative natural growth, seems quite high.

Exogenous population decline certainly does not have to have a negative effect. The Harvard historian Herlihy (1997) describes the consequences of the plague in Europe in the fourteenth century. When the plague struck, in 1348-1349, Europe was densely populated, with scarcity of land for food production. In the 50 to 100 years before the plague, population size was stable. The exact extent of the shrinkage is not known, but Herlihy notes that around 1420, Europe's population was barely more than a third of what it was a hundred years earlier (o.c. p. 17). According to him, this broke the Malthusian stagnation. From land scarcity and relative abundance of labour, the economy turned to the opposite, with high wages and cheap land and capital. This stimulated factor substitution and innovation. The late Middle Ages were a period of impressive technological progress, with the invention of printing, larger ships and better weapons, and labour market restrictions were removed. Such mechanisms still exist, of course. The decline in fertility and the possible decline in population are now endogenous. Japan is often referred to as a showcase of the consequences. Fertility has been below 2.1 since the late 70s; in the high forecast variant of the UN, the value will exceed that from the middle of the 21<sup>st</sup> century, in the low variant, 1.2 is an upper limit for the rest of the century. Natural population growth has been negative since 2005-2010. In the low forecast variant this will remain the case for the rest of the century, in the high variant the growth is negative until 2085. But life in Japan is not that disastrous. The high growth rates of GDP per capita from the 60s have indeed disappeared, but decreases are exceptions, and even after 2010 the average growth is still above zero. And GDP per capita, of course, is not a good criterion. For one, it ignores the value of leisure. It also ignores the value of extending lifespans and only counts the related disadvantage of production decline due to falling participation rate and the associated increase in the dependency ratio. The consequences of this in the public sphere depend on the way in which public services are financed (such as pay-as-you-go or funding for pensions) and whether provisions are publicly or privately offered, as demonstrated in Muto, Oda and Suto (2016). There is also no acknowledgement that the decline in fertility is endogenous and apparently desired by the families: why would you then want to increase it?

It would be strange indeed to have policy determined in the Netherlands by fear of population decline. For that, the benefits of a smaller population are too great in a country with obvious land scarcity and hardly reconcilable wishes for spatial planning, for living, working, recreation, mobility, nature, rural and urban spheres, tranquility and biodiversity. In fact, the tensions can hardly be solved anymore. The question from the House of Representatives to the government, in 2018, "to map the social consequences of changes in the size and composition of the population in the middle of this century on the basis of a number of scenarios" takes the projections about population development as given. But spatial policy can no longer accept population development as given, but must develop a clear vision of it. Including supportive policies for losers, such as laggards in depopulating areas and languishing villages. And such a vision must then result in actual policy.

## 5. A policy stalemate?

High postwar population growth created an increasing sense of urgency to reflect on the future geographical structure of the country. Initially the most pressing question was where to locate this growing population, to provide housing, space for living and working, an infrastructure to connect these locations. The first Memorandum on national geographical planning, on the development of the western part of the country, published in 1958 by the State Service for the National Plan, noticed the concentration of population growth in the western, most absolute part of the country. It anticipated a battle for space, crowding out, literally, of agricultural and recreative destinations of land, and formulated the policy goal of “allowing this region to maintain its function for the Netherlands, Europe and world traffic while at the same time offering a good living and working environment for millions of individuals attracted by this development“ (*Rijksdienst voor het Nationale Plan*, 1958, 11, quoted by Bruinsma en Koomen, 2018, 31). Space was not considered a constraint on population growth, population growth (including national and international mobility) set the target and geographical planning should solve the conflicting claims on land. The basic solution was a rim city with a green heart. Population growth should be accommodated in the urban ring of Utrecht, Amsterdam, The Hague and Rotterdam that lies as a horseshoe against the coast, with the inner circle preserved as a rural green heart. In later years, expulsion of business and population from the rim city to the other parts of the country was stimulated, in policies laid out in a series of memorandums on geographical planning. This absolute condition policy was given up towards the end of the century while the most recent development is an attempt to return to central command.

The options are limited. Emigration was considered a serious policy instrument Oppositen the early 1950's, but is now a forgotten taste on the menu.<sup>10</sup> Restricting immigration requires a tough policy effort, nationally against business firms short on employees, at the level of the EU to opt out from existing policy stances (as Denmark and Hungary do) or to adjust these policies union-wide. A cap on foreign students conflicts with EU rules and interests of universities. Improving the structure of labour supply, by restructuring education to cater better to labour demand cannot be accomplished overnight. Freeing up land from agriculture and horticulture is not welcomed by the farming community. Reducing the spatial intensity of activities (or, stated conversely, increase the intensity of absolute condition of space) cannot solve all conflicts between competing destinations, certainly not if intensification means combination of functions. In fact, the absolute condition that may face least oppositen is creating new land in the North Sea, along the west coast. Phantasies and sometimes rather detailed plans have been launched.

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<sup>10</sup> Outflow of immigrants is not negligible. “Of all emigrants in 2021 (107,406 individuals), 90.0 percent had a first-generation migration background. They were not born in the Netherlands. Of all the people who moved abroad, the majority had a background in the European Union. Most first-generation emigrants, more than 70 percent, return to their native country.” [Emigratie \(cbs.nl\)](https://www.cbs.nl/en-gb/2022/05/emigratie); May 3, 2022.

It seems a fundamental reflection is in order. The scarcity of land, or more generally, of space, has become a choking constraint. The predicted rise in sea levels may make some areas unfit for habitation. To solve the competing claims requires courageous decisions that will be accepted as fair compromises. The political institutions are at present unable to deliver them. Sloppy and hastily taken decisions have to be abandoned after they have been contested in the courts. Without a fundamental reflection on the future and without decisions that can be explained and defended it will just remain muddling through.

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