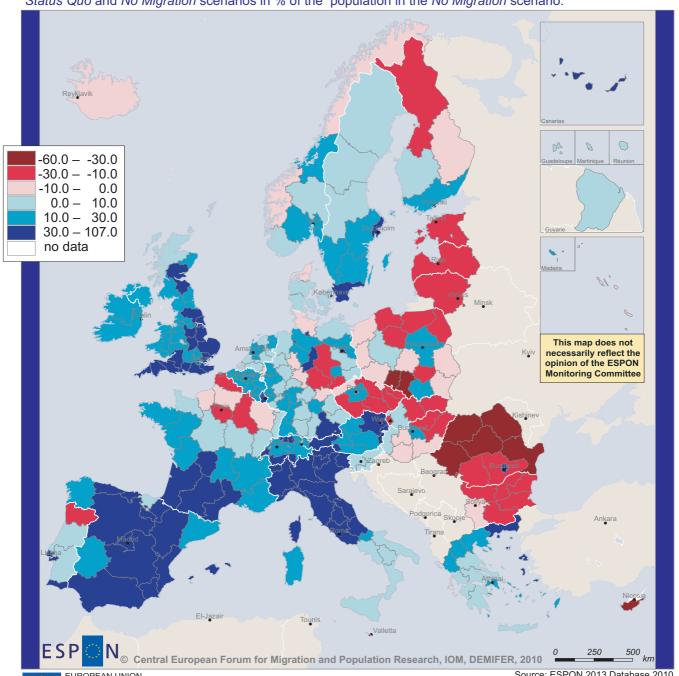


IMPACT OF MIGRATION ON POPULATION CHANGE

Results from the ESPON DEMIFER Project

Contrary to the past, natural population development will have only limited impact on population change. Today, the most important force behind European population change is international migration, but the impact of internal migration is also considerable. Three quarters of all regions will have a larger population in 2050 if current migration flows continue than if there were no migration. To explore the impact of migration on population change the ESPON project DEMIFER (Demographic and Migratory flows Affecting European Regions and Cities) has analysed the change in population in 2050 based on a *Status Quo* Scenario and a *No Migration* Scenario as well as a *No-Extra-Europe Migration* Scenario.

Map 1: Impact of Migration on Population in 2050 - Calculated as the difference in population between the *Status Quo* and *No Migration* scenarios in % of the population in the *No Migration* scenario.



AIM OF THE DEMIFER PROJECT

The aim of the DEMIFER project is to assess future changes in population growth, the size of the labour force and the ageing of the population, and to explore different policy options aiming at regional competitiveness and territorial cohesion. Assessing the impact of intra-Europe and extra-Europe migration on population dynamics was one of the main tasks in this endeavour.

ASSESSING THE IMPACT OF MIGRATION ON POPULATION

To analyse the impact of migration on the population and labour force at regional level in the ESPON area in the period 2005-2050, the DEMIFER team calculated three reference scenarios. The first one (Status Quo) is a simulation of what would happen if the demographic regimes of mid-decade (2005) continued unchanged until 2050. In the other two scenarios all or some migration streams are blocked: in the No Migration scenario, population of the regions changes due to births and deaths only, while in the No Extra-Europe Migration scenario it changes also due to internal and international intra-ESPON space migration, but no extra-European migration. A comparison of the results of the three simulations yields estimates of the impact of migration on population change. The simulations were prepared with the MULTIPOLES population dynamics model.

KEY FINDINGS WITH REGARD TO MIGRATION

- Migration, both extra-Europe and intra-Europe, will have a significant impact on demographic and labour force development of regions.
- Migration will benefit the already affluent regions, whereas poorer regions will lose population due to migration. Similarly, migration will reduce ageing in affluent regions and increase it in poor ones.
- Most countries and regions experiencing population decrease do so mainly due to natural change (the difference between births and deaths), while regions which gain population do so mainly due to extra-Europe migration.

REGIONAL IMPACTS OF MIGRATION

The overall impact of migration streams on regional populations is illustrated on Map 1, which presents the differences between 2050 populations in the *Status Quo* and *No Migration* scenario, scaled to the latter. Over 75 % of the regions are gainers. In 24 % of the regions, 2050 population would be higher by 30 % or more compared to the *No Migration* scenario. In the EU15 almost all regions, except those in north-eastern France, north Portugal, north-eastern Finland and some regions in the former East Germany profit from migration. The most profound gains would take place in Italy north of Naples, south-western France, some south-western regions of Spain and in Algarve, all

forming a broad Mediterranean crescent, and in east and south-west England. They will be "financed" from three sources: extra-Europe migration, international intra-Europe migration and internal migration. The European regions which would pay for these gains are located in the East, especially in Romania and southern Poland. Internal migration also plays a role and would fuel for example the increase of Bucharest, Mazowsze and the hinterland of Prague. In Paris, on the other hand, large internal outmigration is responsible for the negative population balance.

Overall, the divide goes along the wealth and accessibility lines: affluent regions, including large agglomerations in Central and Eastern Europe would gain on migration whereas far away and poor regions would lose. Keeping in mind that migration is a powerful component of population dynamics, we should be aware of general consequences of migration, namely two interlinked processes: (i) regional and in some cases even national depopulation in areas most negatively affected by migration, and (ii) concentration of population in the regions offering a combination of accessibility, affluence and nice climate. Far going decreases of population cannot be isolated from regional economic development.

TERRITORIAL PATTERNS OF MIGRATION

Urban regions often face a negative internal migration balance as a result of migration to settlements outside the urban areas. At the same time, urban regions usually attract international migrants because of the availability of cheap housing and jobs and the presence of a resident migrant population. In more attractive regions the available housing tends to be occupied primarily by internal migrants, restricting the possibilities for international migrants to settle in these regions. Urban regions, especially those that encompass big cities, also often attract young populations (students, young active and foreign immigrants) and expel older active ones, such as inner London. On the other hand, there are also regions that either attract both young and older migrants (e.g. various regions in Spain) or expel both (e.g. various regions in Poland).

TYPES OF MIGRATION STREAMS

In 32 % of regions intra-Europe migration has a larger impact on population change than extra-Europe migration. This is true in particular in the regions of Bulgaria, Poland, Romania and Slovakia, where population decreases significantly through intra-Europe migration. In the majority of regions in Western Europe, extra-Europe migration is more significant than intra-Europe migration and is the factor that reduces population decline or even causes an increase. In some regions, especially in Italy, but also in Algarve and Inner London, without extra-European migration the population in 2050 would be almost one third smaller.

COMPONENTS OF NET MIGRATION

At the regional level, population change through migration consists of two different components: internal migration between regions within individual countries and international migration to and from different countries. The influence of these components varies considerably from region to region. Estimations show that for about 64 % of all regions the total migration balance was positive for the period 2005-2010. The combination positive internal and positive external migration occurred most (42 %), followed by the combination positive total, negative internal and positive external (19%). Conversely, there are hardly any regions with positive internal migration and negative external migration. Regions with both components negative (13 %) can mainly be found outside the largest metropolitan regions in the Eastern Europe.

Map 2: Net Migration: Internal and international migration balance in the NUTS2s in 2005-2010 This map does not necessarily reflect the opinion of the ESPON **Monitoring Committee** © Central European Forum for Migration and Population Research, IOM, DEMIFER, 2011 Source: ESPON 2013 Database 2010 Origin of data: Eurostat, NSIs, MIMOSA, ESTAT, Estimations, 2009-2010

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Positive Internal and Negative International Migration

Negative Internal and Positive International Migration

Negative Internal and International Migration

Negative Net Migration

No Differentiation

No differentiation between internal- and international migration for countries with only one NUTS2; Mismatch to NSI data possible

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Positive Internal and Negative International Migration

Negative Internal and Positive International Migration

Positive Internal and International Migration

EUROPEAN UNION

Positive Net Migration

No Differentiation

No data

MIGRATION AND POLICY IMPLICATIONS

As most migrants are in the young adult age group, in general their emigration raises the dependency ratios as it reduces the number of the working age population. Emigration will for instance raise the veryold-age dependency ratio. This dependency measure is defined as the ratio of the population aged 75 and more to the total economically active population and can be interpreted as the burden of the potential long-term care need on the working population. At the same time, in the regions attracting migrants, newcomers increase the younger and more economically active population, reducing the proportion of the very old.

One of the controversial topics in research and in public debate is the assessment of the impact of extra-Europe migration on population development. The first observation based on the model results is that most of the European regions gain population due to extra-European migration. This is not the case in 11 % of regions, mostly located in the 12 new EU Member States, especially the Czech Republic, Romania and Bulgaria. In some regions, in particular in Italy, but also in Algarve and Inner London, extra-Europe migration would generate populations larger by over 40 % than in the scenario with no extra-Europe migration. Extra-Europe migration would also substantially reduce the value of the old-age dependency ratios in all regions. In some Italian and Spanish regions this reduction exceeds 40%.

Extra-European migration would enhance regional labour force in 90 % of investigated regions. However in the Baltic States, Cyprus and regions in the Czech Republic, Romania and Bulgaria extra-Europe migration would mainly cause a moderate reduction in the labour force. In all European regions, the labour market dependency ratios (LMDR; defined as the ratio of the whole economically inactive population to the whole active population) will be smaller due to

extra-Europe migration. In Austria and Switzerland and a large part of the UK and Italy the difference would be 10 - 20 % and therefore very significant. Therefore extra-European migration would have a beneficial, albeit unequal impact on the balance between the labour force and economically inactive population.

In general our research shows that migration. both extra-Europe and migration in general, would have a significant impact on demographic and labour force development of regions. Importantly, it would benefit most affluent regions, whereas poor regions would lose population due to migration. Similarly, migration would reduce ageing in affluent regions and increase in poor ones. Therefore we may expect that migration would be a strong factor increasing regional disparities. This is the aspect of regional policies which is not disputed much yet, but perhaps quite crucial for future regional developments. To prevent the growth of regional disparities it is important to stimulate policies reducing incentives to emigrate from poor to wealthy regions and policies allowing poor regions to attract more extra-European migrants.

While immigration can only partly compensate the impacts of ageing and low fertility, it may be an important force for territorial cohesion. At the same time extra-European migration must be complemented by integration policies to avoid further labour market segmentation. Changing attitudes towards migration from being a burden to a benefit of the European territory is an important part of this. Thus migration policies will only be successful if they are combined with policies to promote territorial cohesion in other areas as well, such as integration, education, housing and labour market policies. In the light of demographic and labour market challenges, increasing the attractiveness of regions falling behind and losing population may be just as important as boosting the competitiveness of already vibrant regions that benefit from migration.

MORE INFORMATION

One of the major priorities of the ESPON 2013 Programme is to observe demographic trends in Europe, to look into future demographic developments and to link these to economic, social and environmental development issues in European regions and cities. Within this Programme, ESPON initiated and funded the DEMIFER research project running from 2008-2010. The DEMIFER project was carried out by a team of researchers from the Netherlands Interdisciplinary Demographic Institute (NIDI, Netherlands, Lead Partner), the University of Vienna (Austria), the International Organization for Migration/Central European Forum for Migration and Population Research (IOM/CEFMR, Poland), School of Geography of the University of Leeds (United Kingdom), the Netherlands Environmental Assessment Agency (PBL, Netherlands), the Nordic Centre for Spatial Development (Nordregio, Sweden), and the Institute for Research on Population and Social Policies, National Research Council (CNR, Italy). The impact of migration study were prepared by IOM/CEFMR. Please note that migration data is from MIMOSA-ESTAT and might mismatch with NSI statistics. More information: Beer@nidi.nl (project in general) and d.kupisz@twarda.pan.pl/m.kupisz@twarda.pan.pl/migration)

The ESPON 2013 Programme is part-financed by the European Regional Development Fund, the EU Member States and the Partner States Iceland, Liechtenstein, Norway and Switzerland. It shall support policy development in relation to the aim of territorial cohesion and a harmonious development of the European territory. ESPON shall support Cohesion Policy development with European wide, comparable information, evidence, analyses and scenarios on framework conditions for the development of regions, cities and larger territories. In doing so, it shall facilitate the mobilisation of territorial capital and development opportunities, contributing to improving European competitiveness, to the widening and deepening of European territorial cooperation and to a sustainable and balanced development.

The Managing Authority responsible for the ESPON 2013 Programme is the Ministry of Sustainable Development and Infrastructures, Department for Spatial Planning and Development of Luxembourg. More information: www.espon.eu www.espon.eu

Texts and maps stemming from research projects under the ESPON Programme presented in this report do not necessarily reflect the opinion of the ESPON Monitoring Committee