

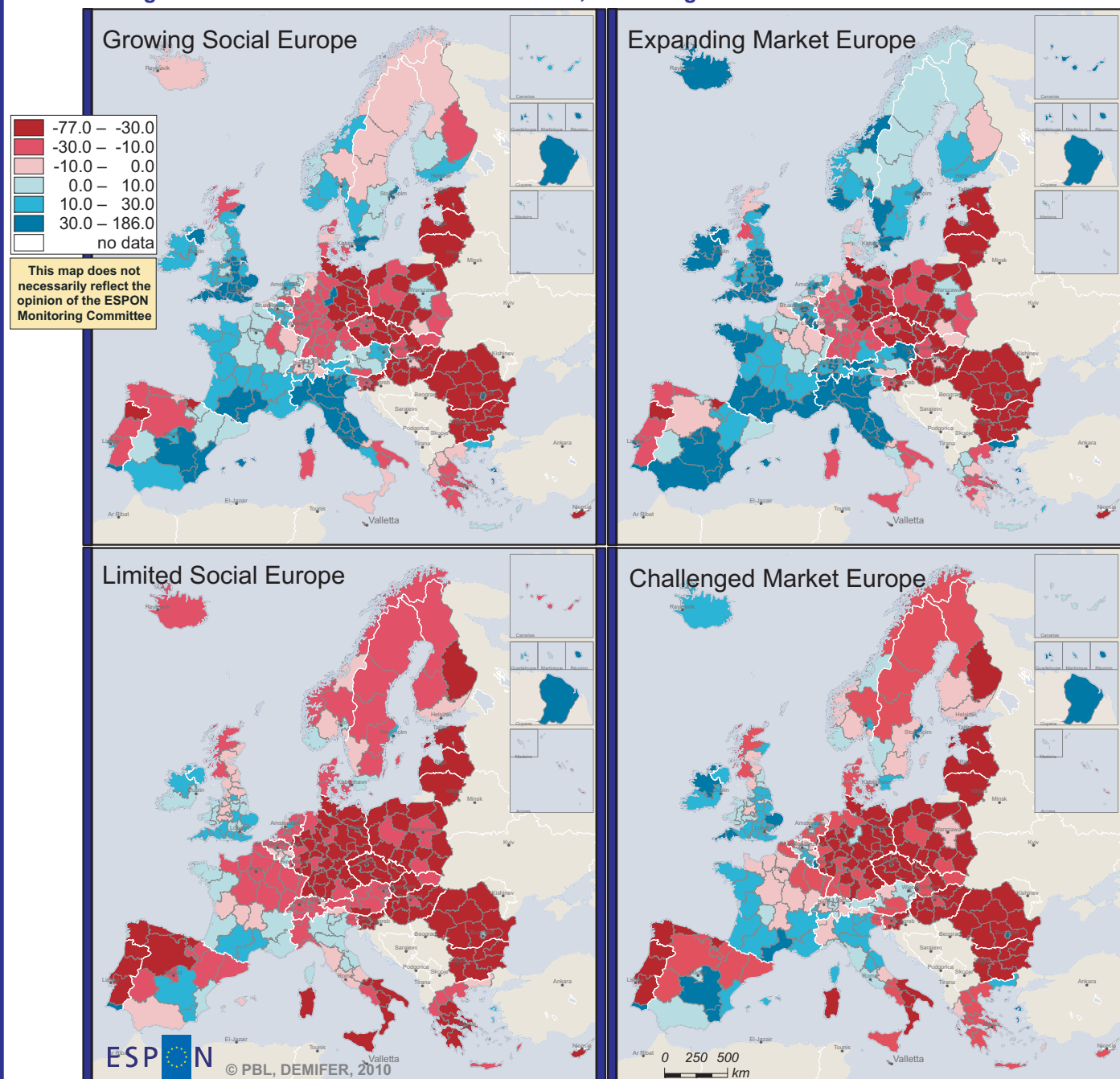


VARYING SCENARIOS IN THE EUROPEAN LABOUR FORCE

Results from the ESPON DEMIFER Project

Without changes in the levels of fertility, mortality and migration, 60% of European regions will experience population decline by 2050. In addition, if labour force participation rates do not change, the size of the labour force will decline in 75% of the regions until 2050. However specific policies relating directly to health, family and migration incentives and barriers, as well as social and welfare policies will have significant impacts on the behaviour feeding into these trends. To further explore the role of policies the ESPON project DEMIFER (Demographic and Migratory flows Affecting European Regions and Cities) has developed four scenarios to show how various policy bundles can lead to different trajectories of developments in population and labour force.

Change in Labour Force between 2005 and 2050, According to Different DEMIFER Scenarios





AIM OF THE DEMIFER PROJECT

The aim of the 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. The scenario exercise was one of the main tasks in this endeavour, as it projects possible long-term trends in the ESPON space.

POLICY SCENARIOS: “ECONOMY-ENVIRONMENT” AND “DISTRIBUTION-FAIRNESS” DIMENSIONS

DEMIFER scenarios link policy bundles to demographic effects using two dimensions: Distribution-Fairness and Economy-Environment. At one end of the Economy-Environment dimension we envisage a situation where sustainable growth has been achieved through technical and social innovation. At the other end of the dimension we envisage a situation where the environmental challenges have not been met and growth as traditionally measured has fallen. The Distribution-Fairness dimension varies from a bundle of policies designed to achieve social solidarity on the one end, to a set of policies designed to improve the operation of markets and the achievement of greater competitiveness in a global market on the other end.

Combining the two dimensions produces four policy scenarios, which we call 'Growing Social Europe' (GSE), 'Expanding Market Europe' (EME), 'Limited Social Europe' (LSE) and 'Challenged Market Europe' (CME). Each of these scenarios is associated with a set of policies that we may expect to impact, to a greater or lesser degree, future patterns of mortality, fertility and migration. As the growth of the labour force does not just depend on the size of the working age population but also on the level of labour force participation rates, alternative assumptions on future changes in labour force participation rates are included in the specification of the scenarios.

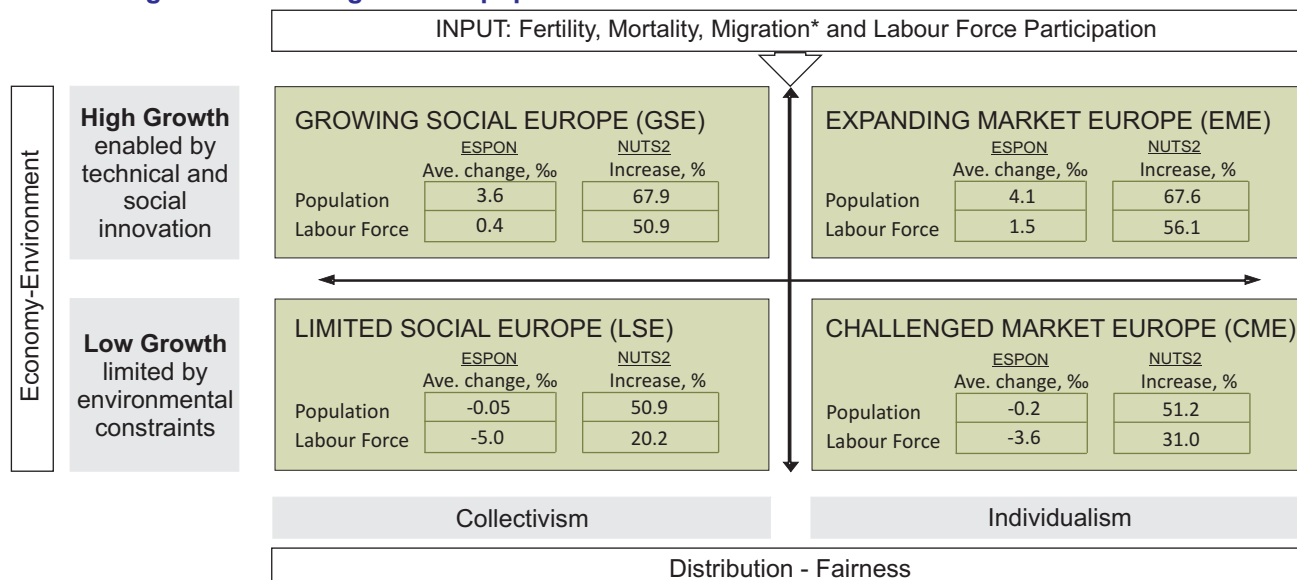
EFFECTS OF POLICIES ON THE LABOUR FORCE

- If labour force participation rates stay the same, the total size of the labour force will decline by 17% until 2050 and it will grow in only 25% of the regions. The four policy scenarios on labour force participation provide an array of possible territorial trends in Europe and distinguish some of the effects of policies.
- Only under favourable economic conditions (high extra-European migration and increased activity rates - as in the EME and GSE scenarios) will the total size of the labour force increase by 2050. However 35 and 40 % of the regions in the EME and GSE scenarios respectively will still face a decline in the size of the labour force by 10% or more by 2050.
- If economic conditions are poor (activity rates decline or stay the same and immigration is low - as in the LSE and CME scenarios), regions will experience a decline in the labour force. Further, 55-70% of the regions will experience a decline of the labour force by 10% or more and even decrease by 30% or more in most of the eastern and southern European regions.
- As shown in the table below, over 50% of all NUTS2 regions in Europe will experience both an increase in population and labour force in the GSE and EME scenarios, while only 20-30% of the regions in the LSE and CME scenarios see an increase in both of these.

SCENARIO INPUTS

Two of the policy scenarios focus on the adoption of strong policies for territorial cohesion. The GSE scenario operates in favourable economic and environmental settings while the LSE scenario has to deal with scant economic and environmental prospects. The trends in the age specific activity rates are diverging in these scenarios: ascending in the first and descending in the latter. In the GSE scenario activity rates of regions are converging within Europe, while in the LSE scenario there is less convergence among regions. The latter may be eased somewhat by more governmental support to prevent a steep drop in activity rates.

Policy Scenarios with annual average change per 1000 inhabitants in entire ESPON space, and % share of regions with change in total population and in labour force between 2005-2050



* Migration including
 1) domestic migration between the NUTS2 regions,
 2) inter-state migration between the ESPON countries and
 3) extra european migration from outside the ESPON space)

In the two other scenarios public policies are focused on competitiveness. In these scenarios it is seen that the economic market has to do its work, so barriers which impede its functioning are removed. This works fine for the economically stronger regions but less so for the weaker. Notwithstanding a general and steep rise in the activity rates due to a rather high economic growth, regional disparities are becoming larger in the EME scenario as stronger regions show a higher rise. In the CME scenario activity rates are falling due to a sustained economic downturn. Disparities are growing as weaker regions have to face a steeper fall in activity rates than the stronger regions.

Impact of national policies

At the national level policies oriented towards territorial cohesion and/or competitiveness have a large impact on the labour force. In the GSE scenario economic growth is high with sustainable environmental conditions. Activity rates are going to rise. For women, the gap between countries with a modern - (such as the Nordic countries) and a traditional pattern (in some Southern European countries) will nearly be bridged. The traditional activity pattern is characterized by a peak in the age bracket 20-24 years, followed by falling participation rates at higher ages due to the withdrawal from the labour market after marriage or childbirth. In contrast, the modern pattern is marked by high activity rates up to the age of 50, as having children has little effect on women's economic activity.

For males international disparities in participation are mainly present at younger and older ages. The northern countries stand out for their high participation rates with (small part-time) jobs during studies and later retirement ages.

In the GSE scenario international differences in participation will diminish in the future. The example set by northern countries will be followed by others, which implicates a move to retirement at later ages and a higher inclination to combine education with paid work at young ages. Policies in the LSE scenario also strive for more territorial cohesion, but their efforts have fewer positive results due to bleak economic growth everywhere. In the EME scenario the political focus is on international competitiveness. Leading countries will further strengthen their advantageous positions but labour force situation will worsen for the countries lagging behind. In the CME scenario labour participation falls somewhat in line with an economic downturn. Leading countries will try to consolidate their favourable positions, but weaker regions will suffer a serious fall.

TERRITORIAL OUTPUT OF LABOUR MARKET SCENARIOS

In 2005 the labour force amounted nearly 240 million in ESPON area. The prospects on growth of the labour force differ considerably between the four policy scenarios. Only in the EME scenario is a growing

labour force foreseen: about 20 % larger by 2050. This is solely due to higher activity rates as the population in the age bracket 15-65 will be stable up to 2050. According to the GSE scenario, in spite of rising labour force participation rates the size of the labour force won't grow anymore in the future, as a result of a slight negative population growth. Under the GSE scenario, large parts of the Nordic countries, parts of southern Italy and Northern Greece and Northern Spain as well as some central European regions will have to deal with increasing population growth, but decreasing labour force size. The two other policy scenarios sketch a future with a considerable shrinking labour force. In the CME scenario the downfall is still limited to 10 %. As the age pattern of activity rates resembles the current pattern to a high degree, the decrease of the labour force is mainly caused by the shrinking population.

In the LSE scenario a combination of falling activity rates and a negative population growth causes a labour force decline of 20 %.

Rising dependency ratios

The fierce decline of the labour force in the LSE scenario imposes a major financial issue as the pressure on the labour force to provide for the non-working population (the dependency ratio) will increase from 1.1 in 2005 to 1.7 in 2050. This increase of the dependency ratio is visible in other, more favourable, scenarios. Even the flourishing economic circumstances depicted in the EME scenario cannot prevent a rise of the dependency ratio, to 1.4 by 2050. In the other two scenarios the rise is in between that of the previous two scenarios. The main contributor to this rise is the grey pressure: in all scenarios the share of the elderly in the population will rise significantly and this will put a high pressure on the labour force. In the LSE scenario the pressure is aggravated as more people at prime working ages are kept out of the labour force as a severe lack of jobs has discouraged them to look for work.

Regional developments

In the future many regions will be struck by a shrinking labour force. The regional pattern of labour force growth or decline differs considerably between the four policy scenarios. In the LSE scenario most regions located in the eastern part of Europe, many in the southern part as well as a lot of regions located in Germany and Austria will suffer a loss of over 30 %. More or less the same pattern is depicted by the CME scenario, although the number of regions with a severe decline is somewhat lower (and in the wake of it the number of regions in a considerable decline is somewhat higher).

According to the EME scenario the pattern is quite different. A lot of regions located in the northern, western and southern part of the ESPON area will still have a substantially growing labour force. However, within countries differentials in growth figures are



clearly visible. For example, in the UK, Italy, Spain and Sweden the highest growth figures, in general, are regions where large cities are located, attracting labour migrants both from within the country as abroad due to their economic potential.

Most regions in Germany will still face a declining labour force in the LSE and CME scenarios. Labour in-migration is not able to compensate for a lasting negative natural growth (leading to low entrance figures in the labour force). This is also the pattern for the eastern part of the ESPON as a whole, where a majority of the regions will have to endure a shrinking labour force. The regional pattern of labour force growth or decline in the GSE scenario resembles that of the EME scenario, although there are fewer regions with high labour force growth (of over 30 %) and more regions with considerable growth (of between 10 between 30 %). This is due to the convergence assumption of this scenario: fewer regions have extreme growth figures.

POLICY SCENARIO IMPLICATIONS FOR THE LABOUR FORCE

The scenarios developed within the DEMIFER project show how various policy bundles can lead to different trajectories of demographic and migratory development. However it is difficult to be precise about the impacts of a set of policies on demography, as there may be other context-specific variables that intervene. The qualitative policy bundles implied in the labour force scenarios include trends in participation, the participation of younger and older persons as well as females, and policies and attitudes towards full time, part time and self-employment.

There are several measures that could be taken at national and regional level to deal with this, but these measures often need to be combined with other types of policies. National family policy can be an incentive

to increase fertility rates, and also have a fundamental influence on the labour supply of women. For example in the Nordic countries generous parental leave and subsidized childcare are largely organized to facilitate the reconciliation of employment and parental responsibilities for both parents, helping to solve the work-life balance. But unless couples have prospects of getting jobs in the future, such family friendly policies will not lead to increases of labour force participation.

A shrinking labour force will be a problem for many regions in the future, and particularly for the regions that are already facing economic difficulties. Fewer regions under the EME scenario than the GSE scenarios will be affected as the labour market is expected to be more vital in regions where resources are used in a sustainable and cost-efficient manner so that the economy as a whole continues to grow. It will be essential to reduce the number of inactive people on the labour market in order to mitigate the effects of ageing. National policies to increase the retirement age can address this. But the raise will not be effective unless employers are also prepared to hire older workers and the aged remain healthy.

Migration from outside Europe may help increase the size of the working age population in some regions and economic migration may help to meet the needs of the labour market. However immigration policies to allow such migration may be beneficial only if integration policies are successful.

Our scenarios assume continuation of established migration patterns within Europe. Within countries the scenarios assume continuing migration shifts away from poorer to richer regions, from peripheral rural regions to dynamic metropolitan regions and from those centres to attractive peri-urban or amenity regions. This will be explored further in a subsequent policy brief.

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 labour market scenarios were prepared by University of Leeds and PBL. More information: Beer@nidi.nl (project in general) and Phil Rees, p.h.rees@leeds.ac.uk and Andries de Jong, Andries.deJong@pbl.nl (Scenarios)

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

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