

Inspire policy making by territorial evidence

ESPON Policy Brief

Territorial Scenarios for Europe towards 2050

Territorial scenarios focusing on the development of metropolitan regions, of cities or of regions will towards 2050 deliver the same level of economic growth for Europe. However, attention to the development of cities seems to have a slight advantage towards 2030. An evolution during 2020-2050 gradually unleashing more and more growth potential for cities and regions will, assuming technological progress, lead to a significant reduction of regional disparities in relative terms, and deliver the highest overall economic growth for Europe with more limited environmental impacts in terms of land-take, transport and energy demand.

Scenario A - Promotion of MEGAs Scenario B - Promotion of Cities Scenario C - Promotion of Regions A- goagtage (19075) 7 Source UCHIT (1907) Nate of data Source (1907) A for and a source (1907) A for and a source (1907) Regional epet No ro-Solene: BCRIT, 201 Idate SASI model, 201 Regional least NUTS 3 Solution Biotim 2012 Capital NUTS 2 MEGAs category 1 0 Capital NUTS0 MEGAs Capital NUTS2 (NUTS1 only Germany and United Kingdom) Capital NUTS 1 (only DE and UK) Links between MEGAs (category 1) Links between All MEGAS NUTS0 boundaries NUTS0-NUTS0 links and length <650km Capital NUTS 3 (except DE and UK) NUTS1-NUTS2 links intra NUTS2 (only DE and UK) NUTSO-NUTS2 links intra NUTS0 (except DE and UK) NUTSO-NUTS1 links intra NUTS0 (only DE and UK) NUTS2-NUTS2 links intra NUTS0 (except DE and UK) Relative increases in GDP 2051 per capita Scenario A/Baseline average over 50 (100=EU31 average) NUTS2-NUTS3 intra NUTS2 links (except DE and UK) Relative increases in GDP 2051 per capita Scenario C/Baseline average over 100 (100=EU31 average) NUTS2 Boundaries NUTS1-NUTS1 links intra NUTS0 (only DE and UK) Relative increases in GDP 2051 per capita Scenario B/Baseline average over 100 (100=EU31 average)

Figure - Illustration of the territorial scenarios

Introduction

Scenarios can be a useful tool to support policy-making. They can be used to communicate insights and discuss potential territorial developments, the impact of territorially relevant policies, and the political choices to be made. They can shape the mindsets of policy-makers. Territorial scenarios can enrich policy processes and help them to capture the long-term and become more effective and efficient by reflecting the territorial diversity of future developments.

The project conducted by ESPON ET2050 follows a tradition of forward looking studies and political visions in territorial development established in Europe. Most recent European policy framework documents as well as territorial strategies defined at regional, national and trans-national scale in Europe, and neighbouring countries, were taken as starting points.

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The scenario and vision project used a methodology based on five successive steps:

- First, the present situation has been studied in relation to sectors most relevant to territorial development and considering the territorial diversity of Europe.
- Second, a baseline scenario has been defined by assuming no significant changes in current policies, available technologies and social behaviour.
- Third, three territorial scenarios (A, B and C) have been defined for 2030 and 2050 by combining socio-economic and technologic framework conditions together with different territorial strategies.
- Fourth, taking the scenarios as reference, a Vision for an ideal situation of the European Territory in 2050 has been defined in a participatory process involving the ESPON Monitoring Committee and other relevant stakeholders (e.g. the European Commission, the European Parliament and the Committee of Regions).
- Fifth, policy reforms needed to achieve the Vision have been defined and proposed as final recommendations.

Present situation

Until 2008 an increasing cohesion between countries and between regions (NUTS2 and NUTS3) was observed at European level, even though inside some countries a decreasing regional cohesion was registered. During the economic crisis, from 2008 until 2013, disparities have been increasing, not only within countries but also between countries and between regions in the European Union.

A fundamental question is to what extend the cohesion process observed before the crisis was sound and sustainable over time, and what was the actual impact of the Cohesion and Structural funds. Either the crisis is temporary and the previous catching-up dynamics will be restored sooner or later, or, the crisis reveals deeper structural weaknesses and increasing disparities at regional and national level that are hard to balance in the coming decades.

Baseline scenario

A baseline scenario projects current trends in absence of neither new policies nor unexpected events. It can be understood as a realistic future ahead, especially in the short and midterm. A baseline scenario is neither the "worst-case" scenario, nor the "most likely future".

In a period of deep economic crisis, it is unavoidable that such a baseline scenario becomes rather pessimistic in terms of economic growth, given the trends of the latest five years, and the nature of current macro-economic policies. The baseline scenario is one of most likely futures for the coming few years, but it is also one of the less likely in the long run, because policies, technologies and behaviours will change, one way or another.

The baseline scenario developed for this study sticks to the principles of smart, sustainable and inclusive growth; is built on the baseline scenarios developed in EU policy documents and recent studies; is a structural description of the European territory, concentrating in particular changes in the following thematic areas: demography, economy, technology, energy, transport, land-use, environment and governance, and their independency with territorial dynamics; and it assumes as starting hypothesis a sluggish recovery pathway for the 2010-2020 period.

Territorial scenarios facing critical choices

Possible futures for Europe in 2050 are explored by developing territorial scenarios based on Territorial Cohesion and a balanced European territory. They consider how different territorial structures and patterns could influence the social and economic future of Europe, and vice versa.

Polycentricity is the overarching concept behind the Territorial Cohesion goal (from the ESDP to the Territorial Agenda 2020). Its first priority says that promoting polycentric development is the precondition of territorial cohesion and a strong factor of territorial competitiveness. Polycentricism as a concept is understood by the territorial scenarios at three different geographic scales: the global (A), national/macro-regional (B) and regional scale (C). And the type of regions to be

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promoted under each scenario is defined based on population density criteria: Metropolitan Global Areas (A), Cities (B) and Regions (C).

Defining a scenario means making choices related to specific issues and specific moments in time to set a direction for Europe to develop. Different assumptions lead to different futures and the baseline is just one set of these assumptions.

Table - Critical choices behind the scenarios

		Scenario A	Scenario B	Scenario C	Baseline
1.	Will European national economies be able to adjust to structural <u>transformations</u> ?	Reduction of Public Administrations. Further opening and deregulation of markets. Private-Public Partnerships. Public support to R&D	Policy reforms based on reinforcing social welfare. Public investments that allow for economic recovery	Policy reforms towards post growth societies limiting both large corporations and central public administrations	No, partially
2.	Will <u>migrations</u> continue to be necessary in Europe to shirking labour market?	Strong migrations bound to most performing economic corridors and MEGAs	Moderate migrations mostly bound to large urban centres from inner regions and other EU countries	Limited external migration. Residential mobility from large cities to medium and small towns	Migrations growing slowly mostly bound to largest metropolitan regions
3.	Will European countries be able to sustain their <u>welfare</u> system?	Welfare system fully privatised	Reinforced to allow its maintenance and sustained through increased taxation	Reformed to facilitate Third Sector (ONG's, social communities) interventions.	Welfare system reduced and further privatised
4.	Will Europe (and its single countries) be able to find ways to finance its <u>public</u> <u>debt</u> ?	Financial debt fully repaid by 2030. Surplus	Financial debt reduced, but not fully repaid by 2030	Financial debt repaid in 2050	Financial debt remains high and public administrations are substantially reduced
5.	Will Europe be able to <u>compete</u> with emerging countries in high-value sectors?	Increased overall competitiveness (manufacturing, biotech, medicine)	Competitive limited to sectors like transport, design, nutrition, green energies	Limited competitiveness to sectors like tourism and welfare services	European technological advantages reduced overtime
6.	Will Europe be decarbonised and decentralized energetically, reducing <u>GHG</u> <u>emissions</u> ?	Increased efficiency of fossil fuels, some RES, emergence of CCS. Targets partially met.	High development of centralised RES and nuclear. Targets partially met.	Decentralised RES. Lower energy consumption. Targets met.	Fossil fuels remain important. Emissions reduced but targets are not met.
7.	Will Europe will be able to tap the untapped potential of its <u>regional</u> <u>diversity</u> richness?	Continuous de- territorialisation of the economy	Yes at National level, while regions in each country will play a secondary role	Local differences emphasised as a major European asset	Partially
8.	Will territorial development and <u>settlement</u> <u>structures</u> be more polarised?	Development focussed on global cities (MEGAs), and on corridors linking them	Development mostly focused on large and medium cities (FUAs)	Development focused on medium and small cities with high quality of life	Increased polarisation
9.	Will Europe be politically more <u>integrated</u> ?	Europe of multiple speeds. Increased cross border integration motivated by economic interests. Increased relations with neighbouring space.	Continuation of existing trends	Limited Federalism. No new EU Members	No significant progress in EU political integration, limited cross-border relationships, Croatia enters EU.
10.	Will decision and management pro- cesses of EU key policies be more <u>decentralised</u> ?	Corporate and business dominated top-down governance	Increased role of Nations (mixed top-down and bottom-up approaches)	Strengthened principle of subsidiarity, bottom-up governance enforced.	Top-down gover- nance with limited decentralisation

What the territorial scenarios towards 2050 show us

The alternative territorial scenarios have been assessed in terms of economic growth, regional disparities, land-use and the environmental impact derived from transport activities. It reveals that redistributive policies do not reduce the long-term average growth of Europe: Economic growth in the long-run is not significantly affected by the promotion of any of the three scenarios presented (A, B and C). A similar average growth can be obtained in the long-run with alternative policy mixes favouring either metropolis and larger cities in developed regions, or medium and small cities in peripheral regions. Economic development mostly depends on technological changes leading to increases in productivity, and public policies such as fiscal and monetary policy.

The main threats of larger metropolitan regions within scenario A are related to higher environmental impacts associated to urban sprawl, neighbourhoods facing social conflicts as well as a higher risk of depopulation of the countryside. However, higher urban densities will limit land uptake and provide for the necessary economies of scale favouring the development and implementation of advanced technologies to manage urban services sustainably. The promotion of secondary cities in scenario B will make land-use change more manageable, as well as social inclusion. Cities are expected to fulfil an important interaction with their hinterland and thus provide a balanced area where both urban and rural areas can thrive and build partnerships. The main benefit of promoting small and medium-size cities in rural areas, in both more and less developed regions (scenario C), is the ability to maintain and protect valuable ecosystems and enhance a vibrant economic area around cities and towns. Cohesion and good stewardship of the land can be promoted through stimulating less favoured areas. The main threat would be an increasing landscape fragmentation due to less dense land development throughout Europe.

When looking ahead the number of uncertainties (or "wild cards") is overwhelming, ranging from political conflicts in neighbouring countries to new global financial breakdowns, new emerging energy and communication technologies, or environmental impacts. To deal with the increasing uncertainty for a longer time horizon, the three alternative territorial scenarios were confronted with three extreme framework conditions for 2050, being economic decline, technologic progress and energy scarcity. To assess the impact of the territorial redistribution among different types of regions all regional transfers of public funds were kept at 0,4% of the total GDP in Europe.

Assuming productivity increases in the coming decades, together with more resource efficiency, redistributive policies at regional level will result in a significant reduction of the disparity gaps while the overall growth is not affected. This evolution, however, is not delivering a reduction of disparities at absolute level. For this to happen, intense redistributive policies seems to be needed beyond the 0,4% European GDP.

In conclusion, an evolution during 2020-2050 gradually unleashing more and more growth potential of cities and regions will, assuming technological progress, lead to a significant reduction of regional disparities in relative terms, and deliver the highest overall economic growth for Europe with more limited environmental impacts in terms of land-take, transport and energy demand.

The territorial scenarios each have advantages and disadvantages, confirming that there is not always an optimal solution. They formed the basis for the Territorial Vision for Europe in 2050 for which a separate report has been published. The territorial scenarios can serve as input for discussing possible territorial developments, the impacts of territorially relevant policies and the political choices to be made to better operationalise territorial cohesion.

Further reading: Working Paper "Territorial Scenarios for Europe", Vision Report "Making Europe Open and Polycentric" and ET2050 project Final Report.

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