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EUROPEAN UNION

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Inspire Policy Making with Territorial Evidence

Territorial fiche

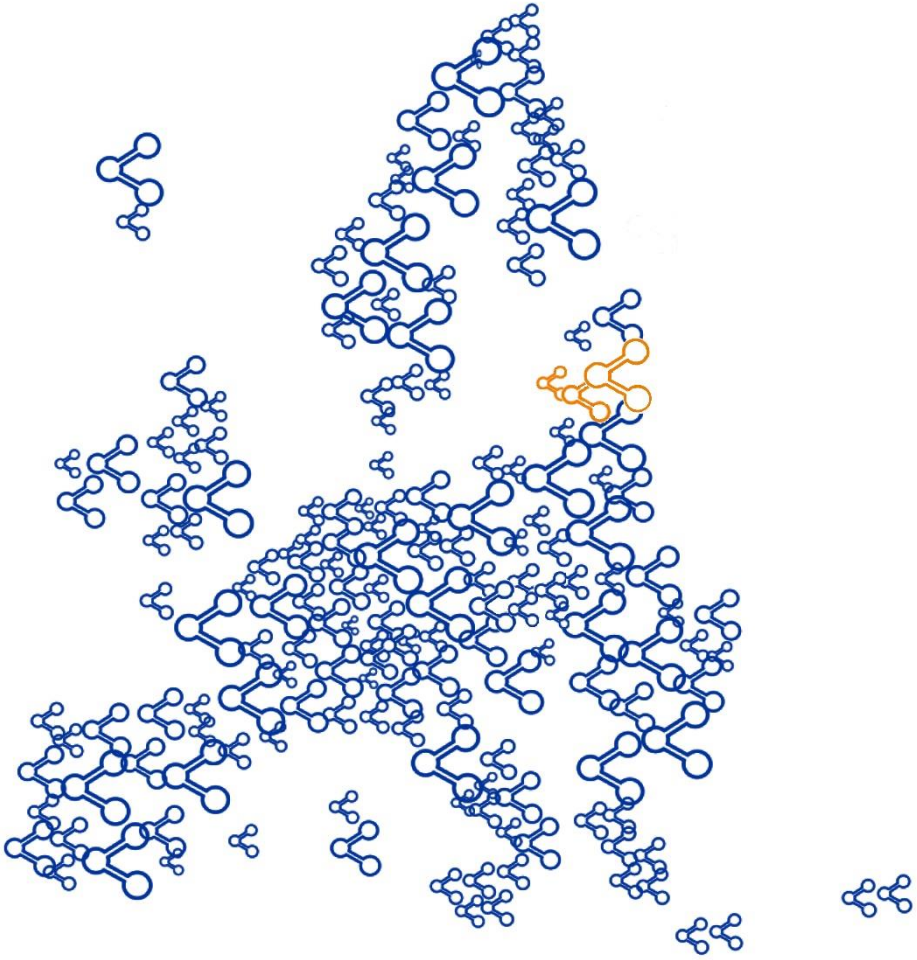
Territorial patterns and relations in Latvia

Demography and population

Sustainability and spatial management

Physical and digital accessibility

Economy and innovations



Interactive version: www.espon.eu/latvia

Introductory remarks

The content of the following overview is a summary of research results from different thematic applied research projects under the ESPON 2020 programme. As a consequence, most indicators and analyses are not based on most recent data but represent the data availability at the time when the research was undertaken. Only in a few cases, for some rather basic indicators that could easily be reproduced, more up-to-date information was used.

It is therefore important to note that this overview is mainly a collection of available findings with different time stamps and not an up-to-date, comprehensive analysis. Its main goal is to showcase the wide range of ESPON research and, by zooming-in on a specific country, to raise interest for the scientific results at a more national and even regional scale.

Demography and population

Demographic changes

Net migration

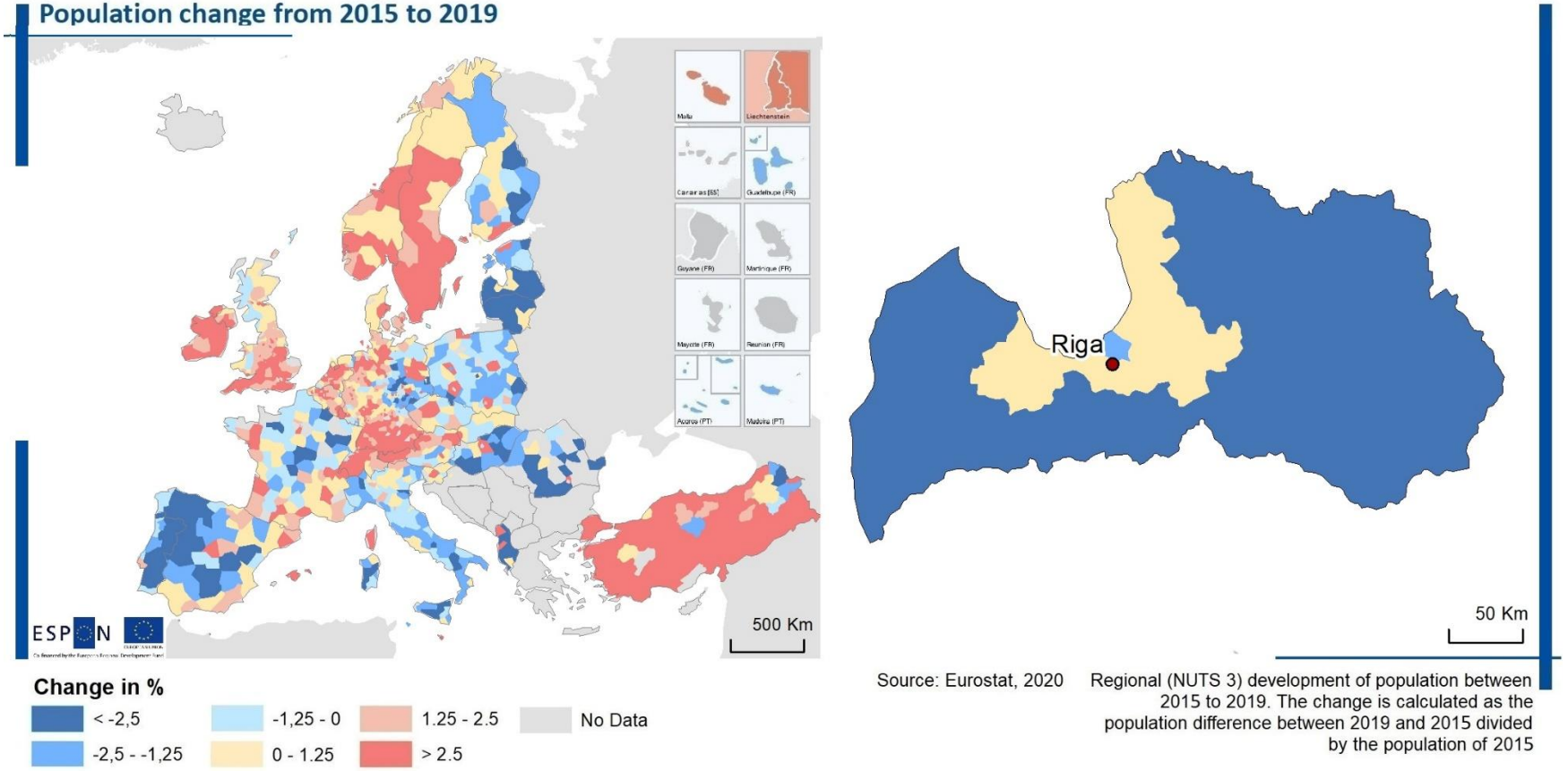
Higher education

Foundations of well-being

Latvia has almost 1.9 million inhabitants. The largest concentration of people is found in and around the port and capital city of Riga (ca. 630,000 inhabitants). There are also small agglomerations scattered throughout the country (68.3% of total population (2020) live in urban areas). The population of the country has the following composition: Latvian 62.2%, Russian 25.2%, Belarusian 3.2%, Ukrainian 2.2%, Polish 2.1%, Lithuanian 1.2%, other 1.5%, and unspecified 2.3% (2018 est.).

This population diversity finds its origins in different important periods of the 20th of century that had a significant influence on the Latvian demography. Since the 1990's, Latvia has experienced a negative population momentum principally caused by lagging birthrates.

Migration has had a significant influence on the Latvian demography during the 20th century. Latvia has been experiencing a decline in population since 1989, with the current population growth rate being -1.12% (2020). This was caused by the emigration of minorities to their countries of origin after the post-USSR collapse in the early 1990s, combined with youth emigration. While the level of education is relatively high at the European level, unemployment amongst the 15-24 years old is at 12.2%, which likely contributes to the departure of the younger citizens.

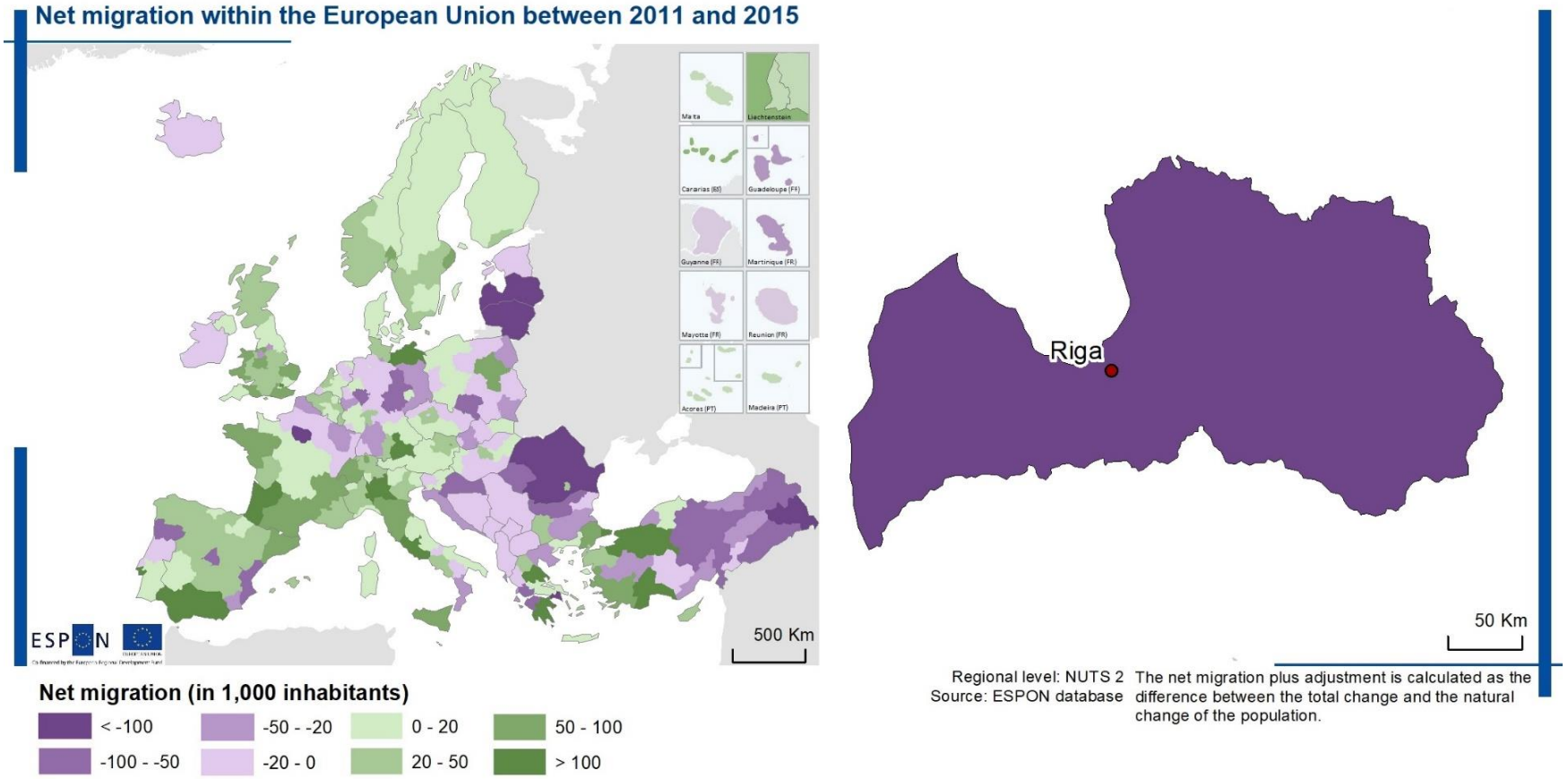


Source: Eurostat, 2020

Regional (NUTS 3) development of population between 2015 to 2019. The change is calculated as the population difference between 2019 and 2015 divided by the population of 2015

Despite an important portion of the NUTS regions lacking data, trends can be observed. Large portions of Eastern Europe, Italy, Spain and France have decreasing populations. For the latter two, however, an increasing population can be observed in urban areas such as Madrid, Barcelona, Bordeaux, Nantes or Paris. The Lowlands, Western-Germany, the UK, Ireland, and Scandinavia are characterised by an increasing population. These population trends are significantly influenced by job opportunities and the economic situation of the regions, as well as immigration patterns.

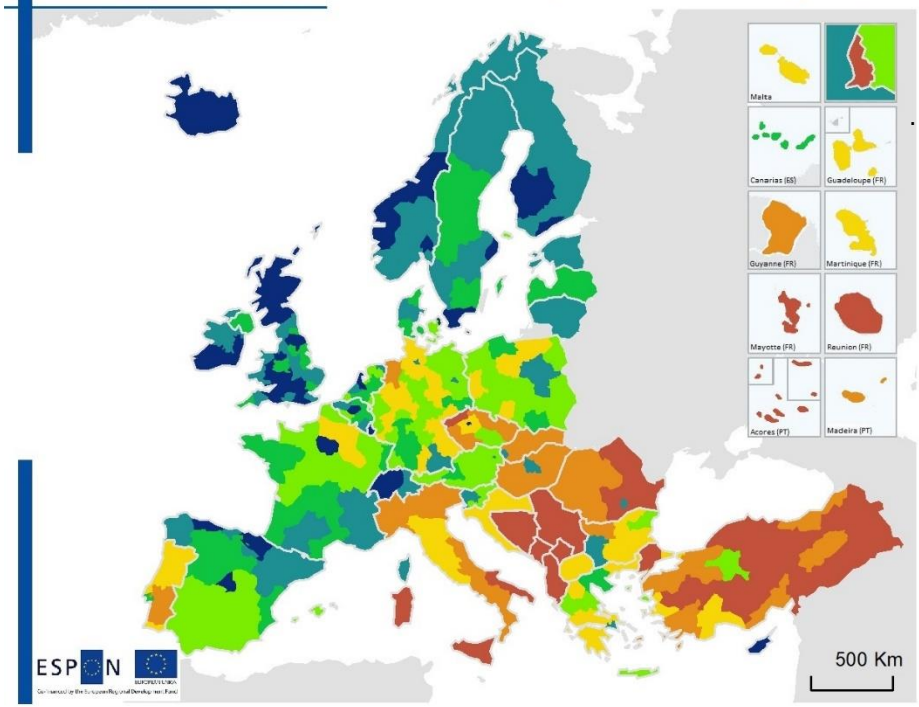
Most regions in Latvia show substantial population decrease from 2015 to 2019. Only the capital Riga and the Riga Planning Region have developed differently. The population decline in the capital was at -1.25-0%, but the surrounding Riga Planning Region showed a slight increase (0-1.25%). From 1920 to 1989, the population has been through significant changes, resulting in a high diversity. Latvia has had a declining population since 1989. A main reason is the economic and political instability in the 90s that caused a rapid birth-rate decline. Minorities tended to relocate to their countries of origin, especially to Russian-speaking areas. Emigration among younger citizens who leave to get higher education or to find unskilled jobs with better wages also contributes to this decline.

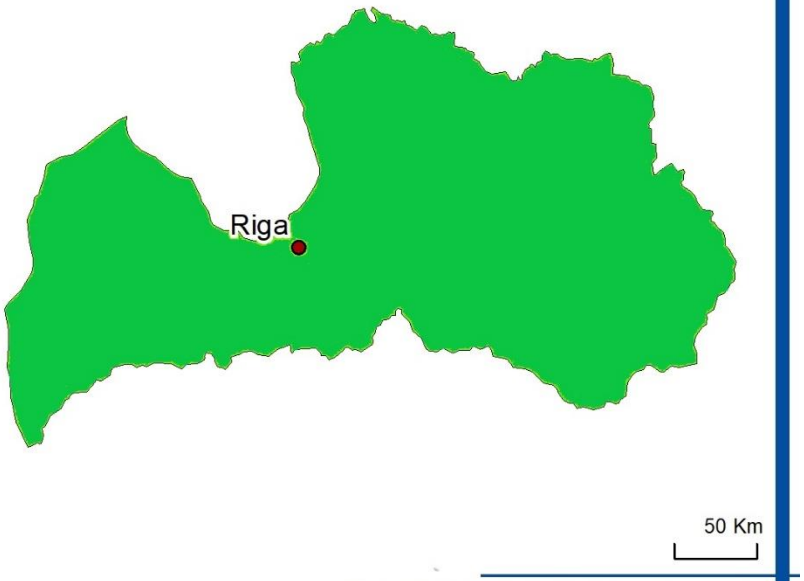


Since the mid-1980s, migration is and continues to be an important development factor. On one hand, migration can be an important factor to mitigate ageing and future workforce shortage, on the other, it can influence settlement and territorial patterns, increasing the size and importance of ethnic minority communities in urban areas, creating tensions and instability. Towards 2030, a continued population increase is expected, similar to the development in 2011-2015. This increase will come with considerable variation between and within countries. Between 2014 and 2030, relatively high population growth is expected in western and northern European countries as well as in the main urban centres in eastern European countries. The population in most parts of eastern European countries and also in Germany will continue to decline.

Latvia is one of the countries in the EU with the fastest population decrease. Latvia has been through significant population changes in the 20th century with an high rate of immigration from Russia and other countries, e.g. Germany and Poland, from 1920 until 1989. However, an important decline of the native Latvian population can be observed from 1935 to 1959. Both the beginning and the end of WW2 were important chapters in that period. Since 1989, Latvia has experienced a decline in population. Emigration of ethnic minorities was the primary reason, at first. After Latvia joined the EU in 2004, new opportunities outside of Latvia rose for a relatively well-educated population. The financial crisis in 2008 changed this opportunity into a necessity for many, which accelerated the process. In 2030, the population of Latvia is projected to be a further 20% lower than in 2014.

Total population aged 24-64 with a higher education degree (level 5-8) in 2016





Rate of attainment (%)

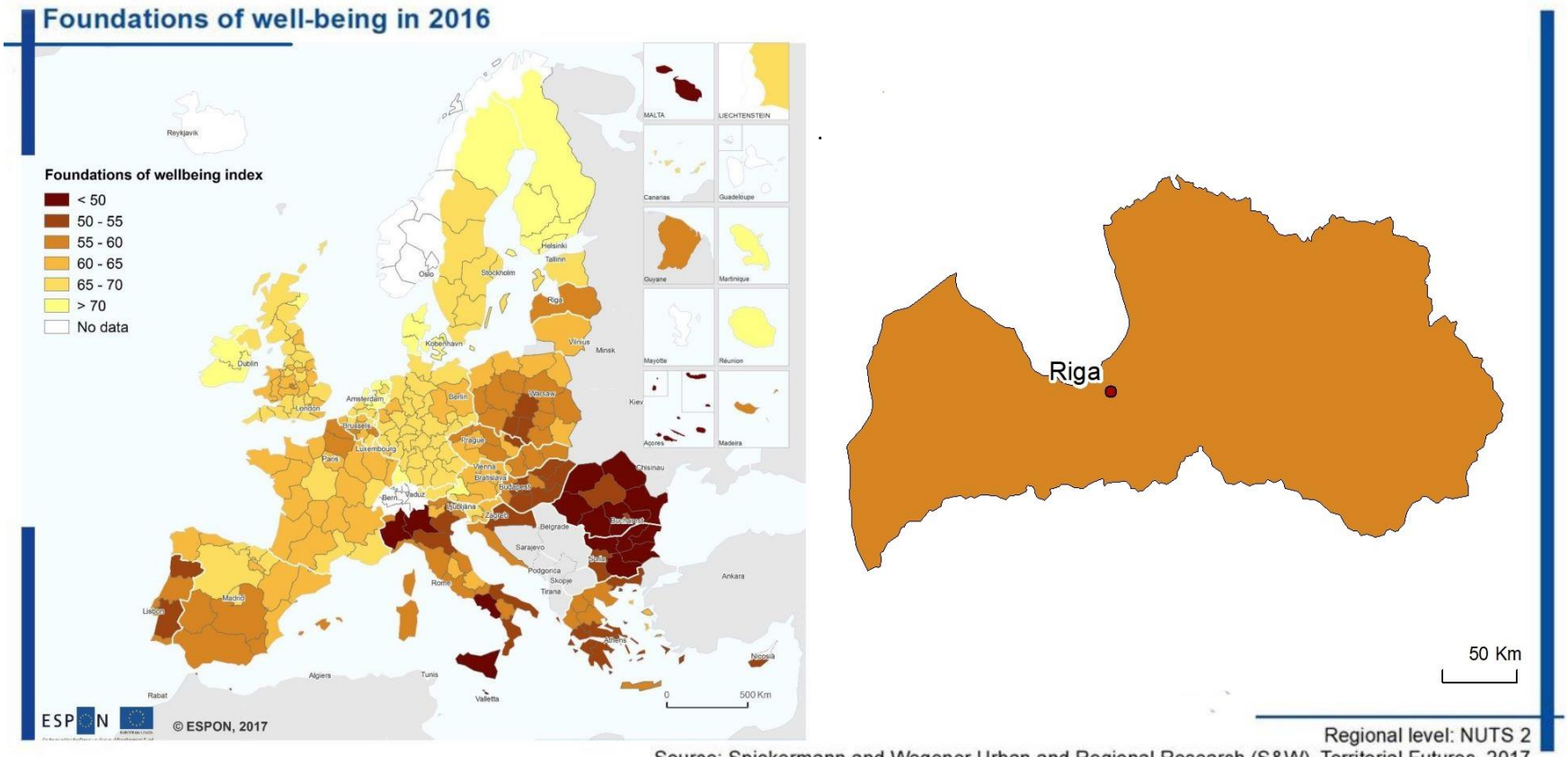
< 15	20 - 25	30 - 35	> 40
15 - 20	25 - 30	35 - 40	

Source: Eurostat, 2016

Regional (NUTS 2) share of population from 24 to 64 years old with an educational attainment of level 5 to 8 according to the ISCED (2011) classification.

Spain, Ireland, Scotland, western Norway, and Switzerland have the highest shares of people with higher education qualifications. In general, metropolitan areas in Europe have a higher share than their surrounding areas. Portugal, Italy, and countries in Eastern Europe have a distinctly lower share. While a large portion of the higher educated population of Portugal and Italy has emigrated to other regions of Europe for job opportunities after the financial crisis, the countries of Eastern Europe tend to have lower participation in higher education.

33.4% of the Latvian population between 24-64 years have received a higher education degree in 2016, which is slightly higher than the European average at the time (29%). In the past, Latvia had a long tradition of ethnic minority education – the first law on education institutions of independent Latvia in 1919 ensured autonomy of education for German, Russian, Jewish, Polish, and Belarussian schools. Now, a stronger emphasis is put on safeguarding the dominant position of the Latvian language. Nevertheless, to ensure an integrated society and global competitiveness, English, Russian, and/or German skills are, for the most part, commonplace and integrated into education. This system has proved to be successful in guaranteeing multiple language proficiency amongst the population.



Source: Spiekermann and Wegener Urban and Regional Research (S&W), Territorial Futures, 2017
Origin of data: European Social Progress Index, 2016

The "Foundations of Wellbeing" index is a part of the European Social Progress index that describes the quality of life on a regional scale[1]. These indexes are intended to complement indicators based on GDP, income or employment. The well-being index, displayed on the map, covers access to four aspects: basic knowledge, access to information and communication, health and wellness, and environmental quality. The map shows significant differences between regions in Europe. In general, regions in Northern Europe show higher levels of well-being than in the south of Europe. The highest level of well-being can be found in Denmark, Ireland, the Netherlands, Finland, and in the northern region of Sweden. Regions with a lower level are situated in Portugal, the north-western and southern parts of Italy, and in Eastern European countries. The lowest levels are found in Italy, Bulgaria, and Romania.

Latvia has a well-being index between 55 and 60, which is slightly below the European average. The index shows the average of the combination of the four following categories described in the previous paragraph for which Latvia has very diverse scores. Latvia scores particularly well in online interactions with public authorities and on the air pollution indicators (NO_2, ozone and micro-particles). However, Latvia seems to underperform in early school leaving, health and wellness in general, non-air pollution, and protected areas. The underlying problems behind the low well-being index are ones that have been on the political agenda most recently and are being addressed in new policies or put up for reform.

Sustainability and spatial management

Overall adaptive capacity to climate change

Installed capacity of onshore wind power and potential

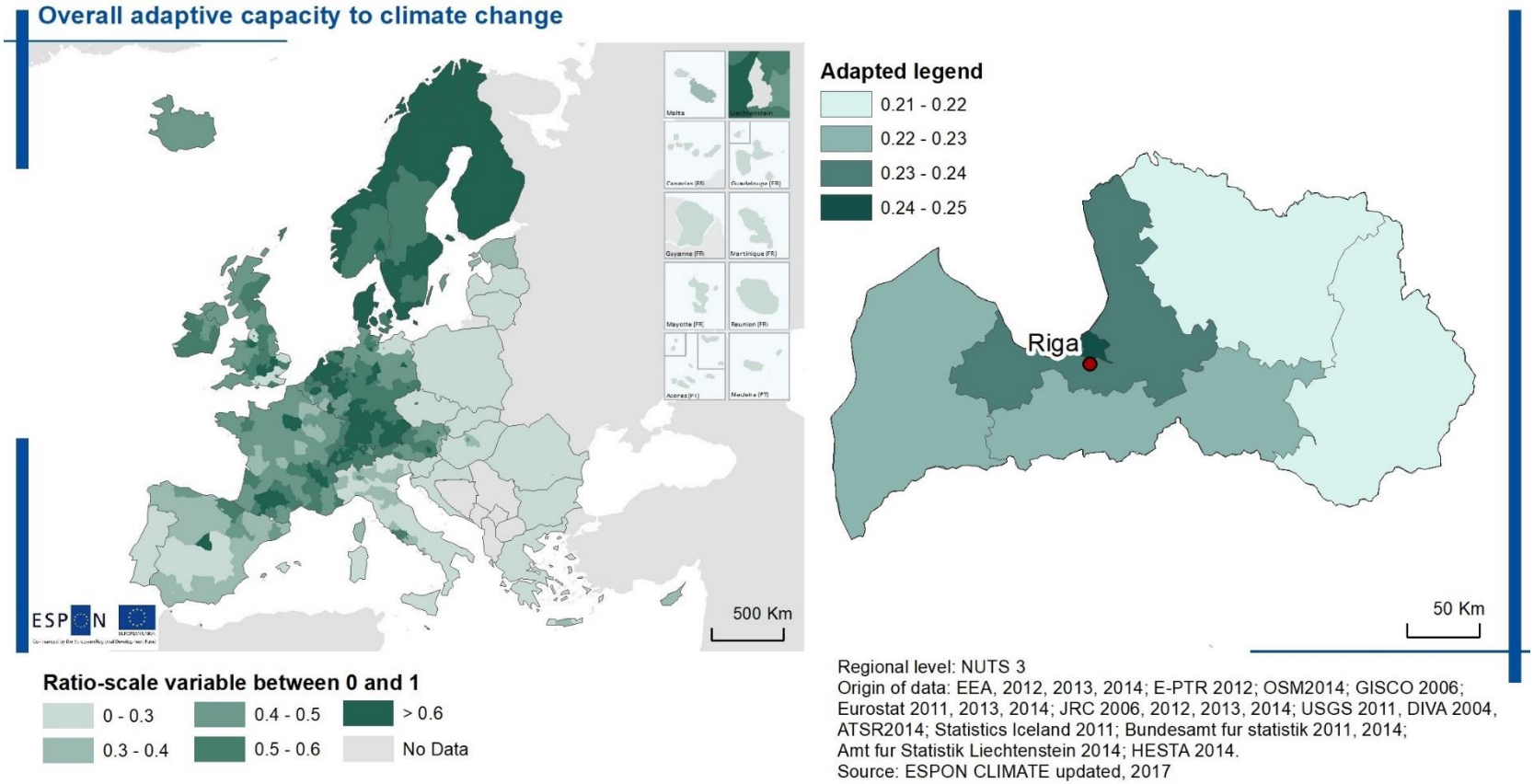
Domestic material consumption and waste production

Spatial distribution of green infrastructure

Urbanisation

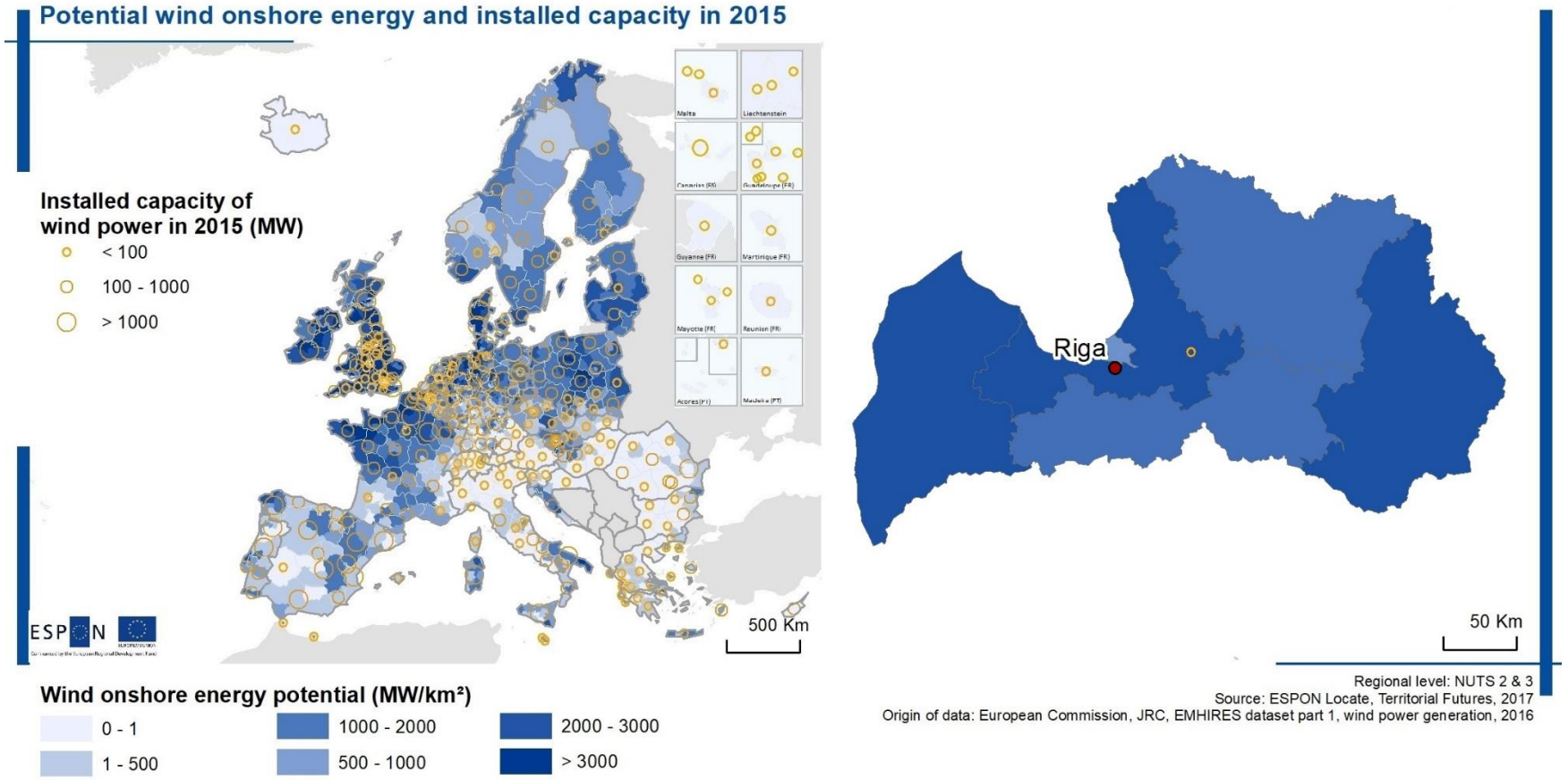
Compared to the rest of Europe, Latvia is not regarded has having a high overall adaptive capacity to climate change. The whole country scores highest in the knowledge and awareness of its population and public institutions. The capital region of Riga seems to have the highest adaptive capacity through its edge in terms of economy and infrastructure.

However, regarding renewable energy production, Latvia has an excellent potential for wind energy production. Also, the strong presence of forestry and natural areas in Latvia combined with its relatively low population density results in high coverage of Green Infrastructure and high domestic material consumption, which can both be regarded as substantial assets for climate change adaptation.



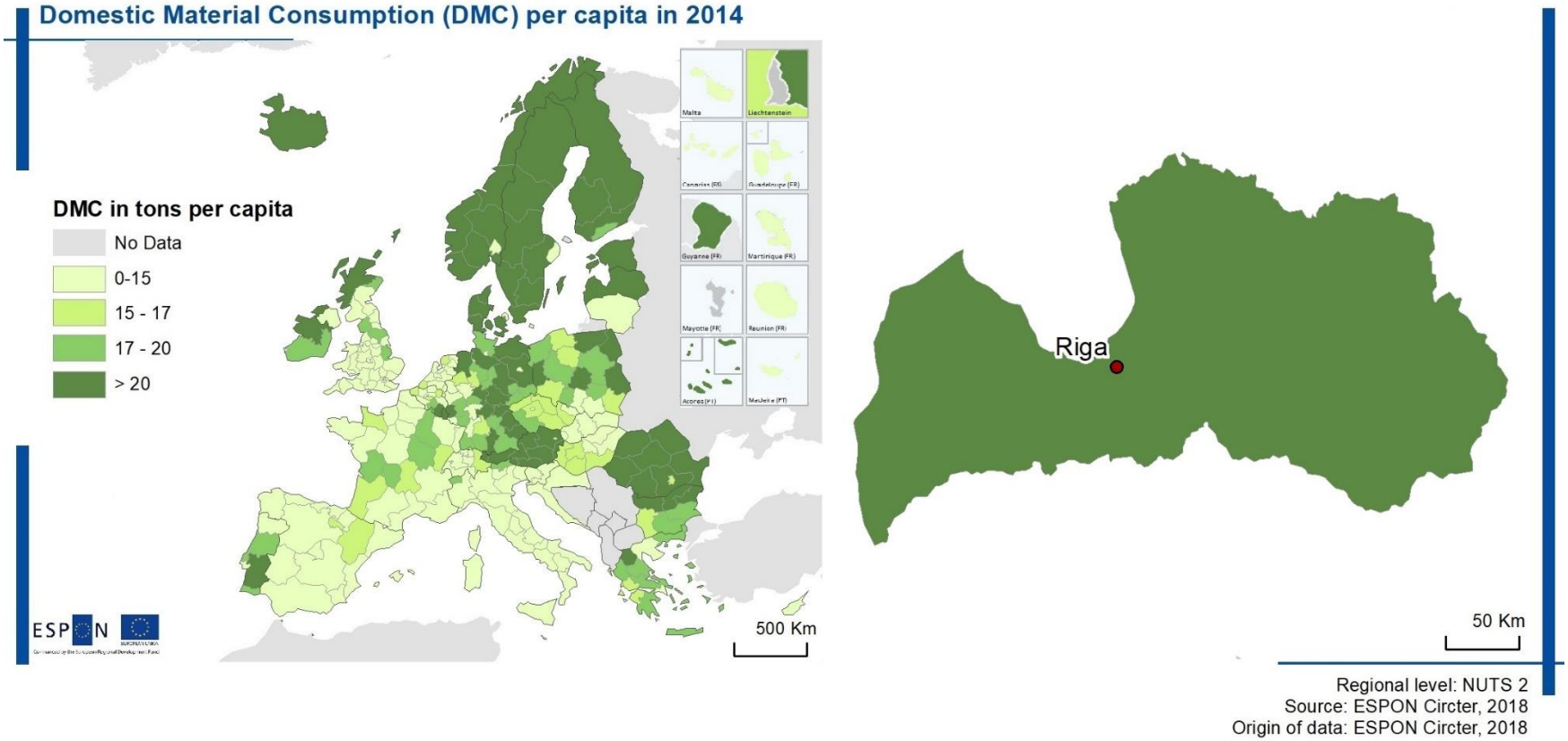
This map shows the overall adaptive capacity of European regions in 2017. The overall adaptive capacity is an aggregate indicator composed of indicators from the ESPON Climate project (including annual mean temperature, annual mean precipitation, change of inundation through river flooding, etc.). The overall adaptive capacity is calculated as a weighted combination of economic capacity, infrastructural capacity, technological capacity, knowledge and awareness, and institutional capacity. Three types of regions score high on this indicator: the vast natural lands in Scandinavia with few settlements, national capitals, the Southwest of Germany and Austria, and the Netherlands.

According to ESPON Climate-modelling (2015), Latvia's index for adaptive capacity to climate change ranges from 0.20 to 0.25. The study's lowest score in Latvia is attributed to a low technological capacity with scores ranging between 0.10 and 0.11. On the other hand, Latvia seems to have a significantly higher adaptive capacity in terms of knowledge and awareness of its population with an overall index of 0.36. The regional variability is caused by the differences in economic and infrastructural capacity. While Riga scores relatively higher in both capacities (0.28 and 0.22), the regions of Pieriga (0.28), Kurzeme (0.26), and Zemgale (0.27) score relatively higher only in their economic capacity.



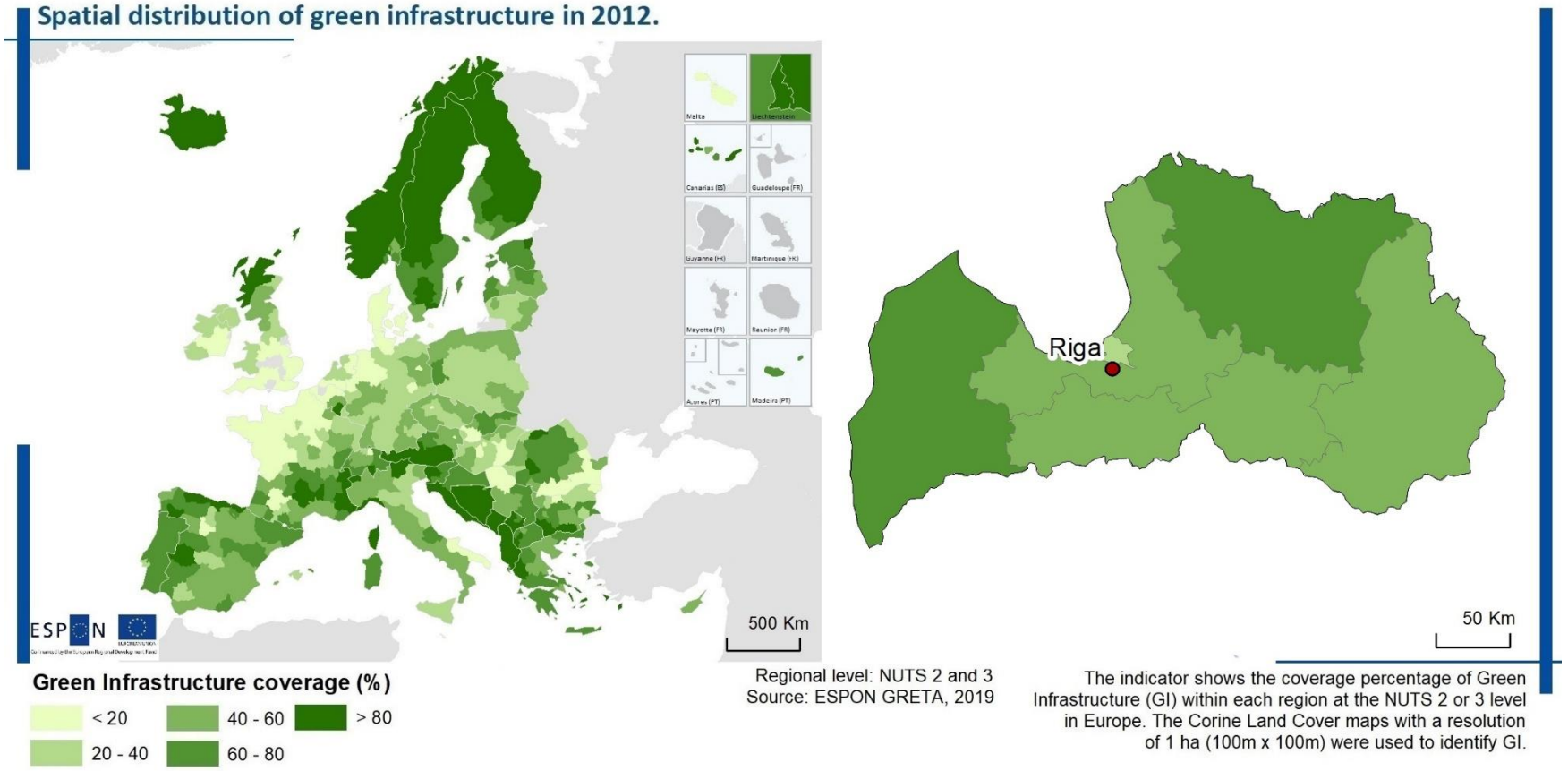
Wind power is currently the second most important renewable energy source (RES) in EU. As a technology it has matured significantly and has become very competitive economically. The potential for wind energy is huge in Europe, however, socio-environmental concerns often must also be taken into account. The highest potential exists around the North Sea and Baltic Sea, along the Norwegian and Irish coasts, and in specific parts of southern Europe. High offshore potentials exist in northern and western areas in general. Spain and North Sea-facing countries are the biggest onshore producers, while the UK and Denmark have the biggest offshore productions.

Latvia is one of the countries in the EU that has the best conditions for onshore wind energy. Latvia slowly began to exploit this potential in 2015. In 2018, overall wind energy in Latvia accounted for only 1.56% of its total production, while the total share in Europe was 9.3%. However, 54.69% of the Latvian energy production was from RES compared to 30.15% in Europe, which puts Latvia in a favourable position. In conclusion, Latvia currently has a favourable position in renewable energy production, largely because of its electricity from hydroelectric plants (39.06% of total production in 2018). Its onshore wind energy potential thus represents an important asset for expanding its RES production in order to meet the Green Deal objectives in 2030.



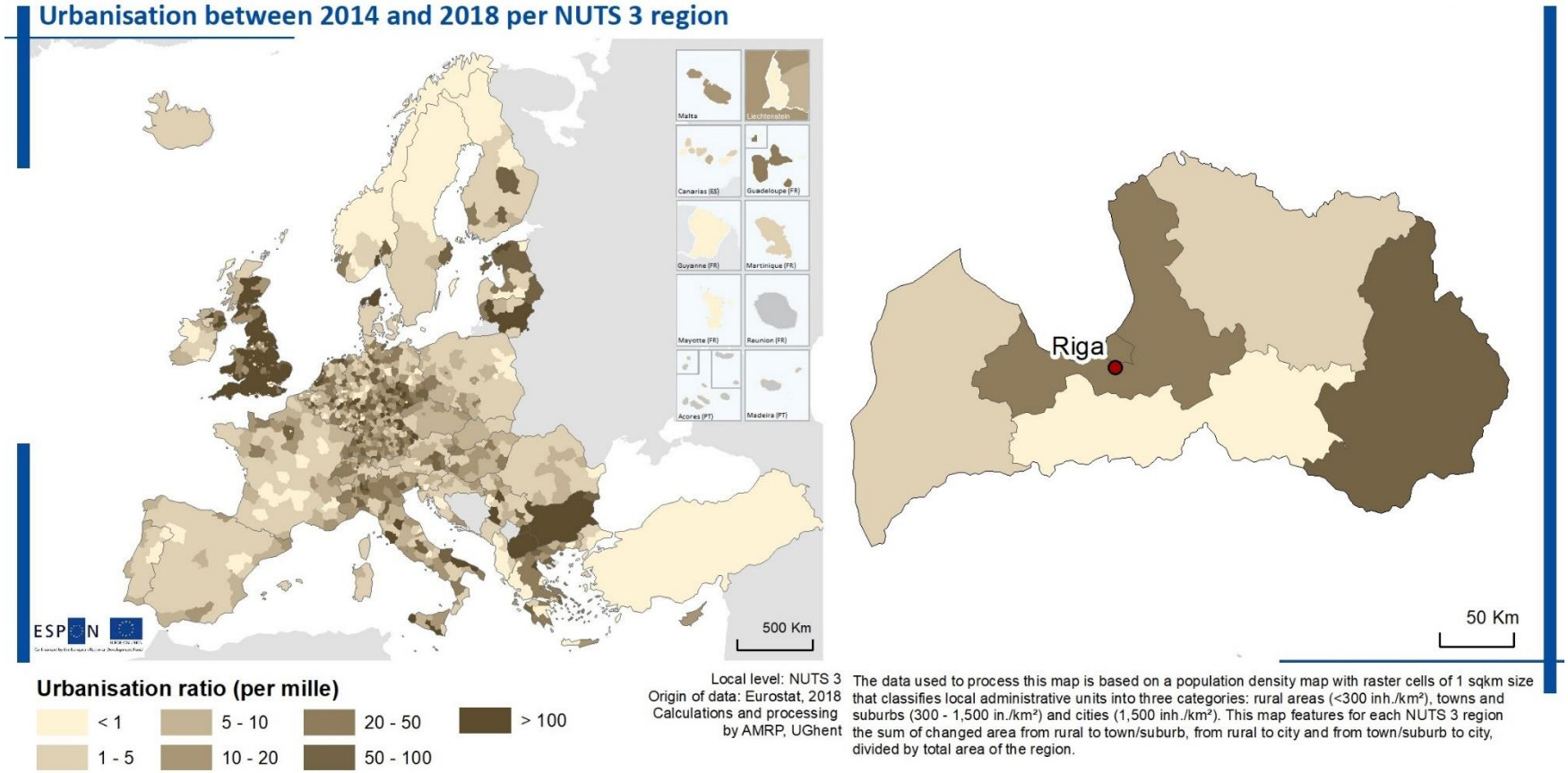
In order to be able to discuss circular economy potentials, material resource use can be measured in terms of domestic material consumption in tons per capita. There are some differences across Europe with high consumption in the Nordic countries, Estonia, Latvia, Austria, Romania, and parts of Germany, Poland, and Portugal. High consumption is often linked to the use of natural resources (e.g. forestry, mining, and agriculture) or to less densely populated areas (e.g. due to materials for building and infrastructures being distributed among fewer people). Also, metropolitan and capital areas tend to have lower consumption rates.

In Latvia in 2014, the consumption of domestic material per capita (DMC) was more than 20 tons according to the ESPON Circter project (2018). This high number can be attributed mainly to two factors. The first is the use of local natural resources. Latvia has a strong forestry sector and a high productivity in the agricultural sector. The second factor is the fact that Latvia has particularly low population density compared to other European member states. The necessary building and infrastructure materials are thus distributed among fewer people, increasing the DMC per capita.



Green infrastructure (GI) is a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services. It incorporates green spaces and other physical features in terrestrial (including coastal) and marine areas. The spatial distribution of GI clearly reflects population density, infrastructure development, climatic and topographic conditions, as well as the distribution of agricultural areas in the EU territory. The coverage of green infrastructure is lowest for regions in north-western France and Germany, south-eastern UK and Ireland, and Denmark. It is relatively high for Nordic countries, the Balkan countries along the Adriatic Sea, and the eastern Alpine region.

In 2012, Latvia had a GI coverage ranging between 36% (Riga) and 63% (Vidzeme). Compared to the rest of Europe, Latvia has a higher than average green infrastructure coverage. It is important to notice that the ESPON GRETA project only included Corine Land Cover maps of a 1ha resolution, which means that GI smaller than 1ha is not taken into account. While Latvia has some notable national parks, such as the Gauja National Park and the Razna National Park, the strong activity in sustainable forestry has a significant effect on its high green infrastructure coverage.



The data used for these maps come from the Geographic Information System of the Commission (GISCO). The classification is based on population density rather than building density. The map shows the change in population density, with the darkest coloured regions expressing the biggest densification from rural area to town/city and from town to city. For instance, large portions of rural areas have densified to towns or towns have densified to city areas in the United Kingdom, Lithuania, and Bulgaria in particular. Overall these densification processes in Europe tend to be diffuse. Each member state has a specific pattern that is likely to be particular to the demographic processes it went through from 2014 to 2018.

In Latvia, the biggest trends in population densification that resulted in a shift from rural to towns/city areas or from town to city areas can be seen in the NUTS-regions of Latgale (73‰), Riga (40‰) and Pieriga (28‰). The densification process in the Riga and Pieriga regions is a comparable trend with the rest of Europe where capital regions tend to increase in population compared to the rest of the country. The densification in the Latgale region might be related to the relatively lower wages in its rural areas and lower availability of infrastructure to access social and economic centres. This could result in a migration from the rural areas to the urban agglomeration of the region[2].

Physical and digital accessibility

Global accessibility

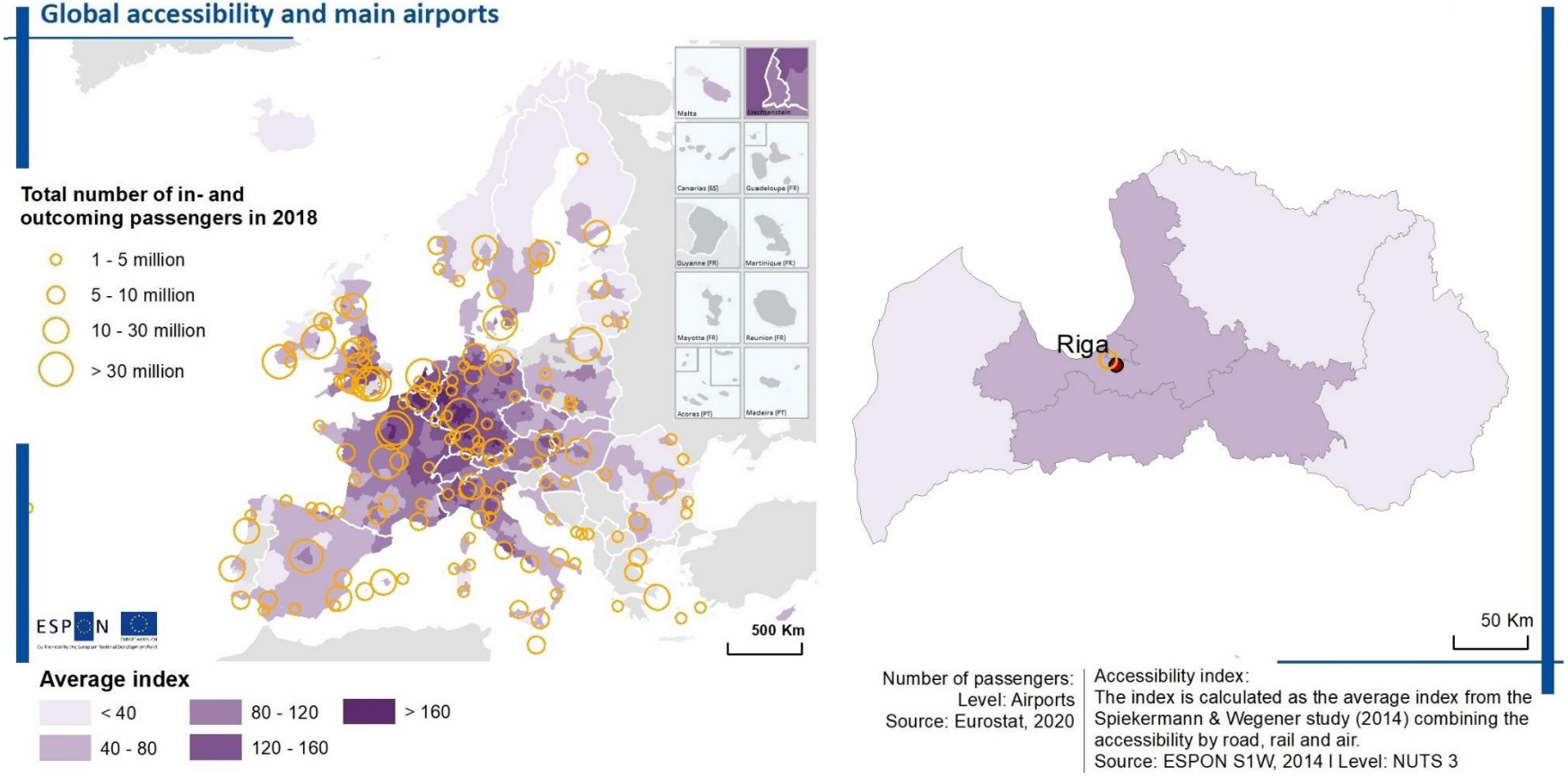
eGovernment interaction

Broadband access and high-speed internet

Latvia's geographical position is slightly peripheral in the EU and the country's position on the global accessibility index is therefore, not surprisingly, at the low end. However, the global accessibility index for Latvia also shows the highest values when compared to the two other Baltic Countries (Estonia and Lithuania). The relatively new Riga Airport, with the advantage of hosting a national airline (Air Baltic), functions as an important hub between northern Europe and the countries east of the Baltics.

Finally, Latvia is among the frontrunners in eGovernment interactions and services, which is enhanced by the large level of broadband access and high-speed internet coverage.

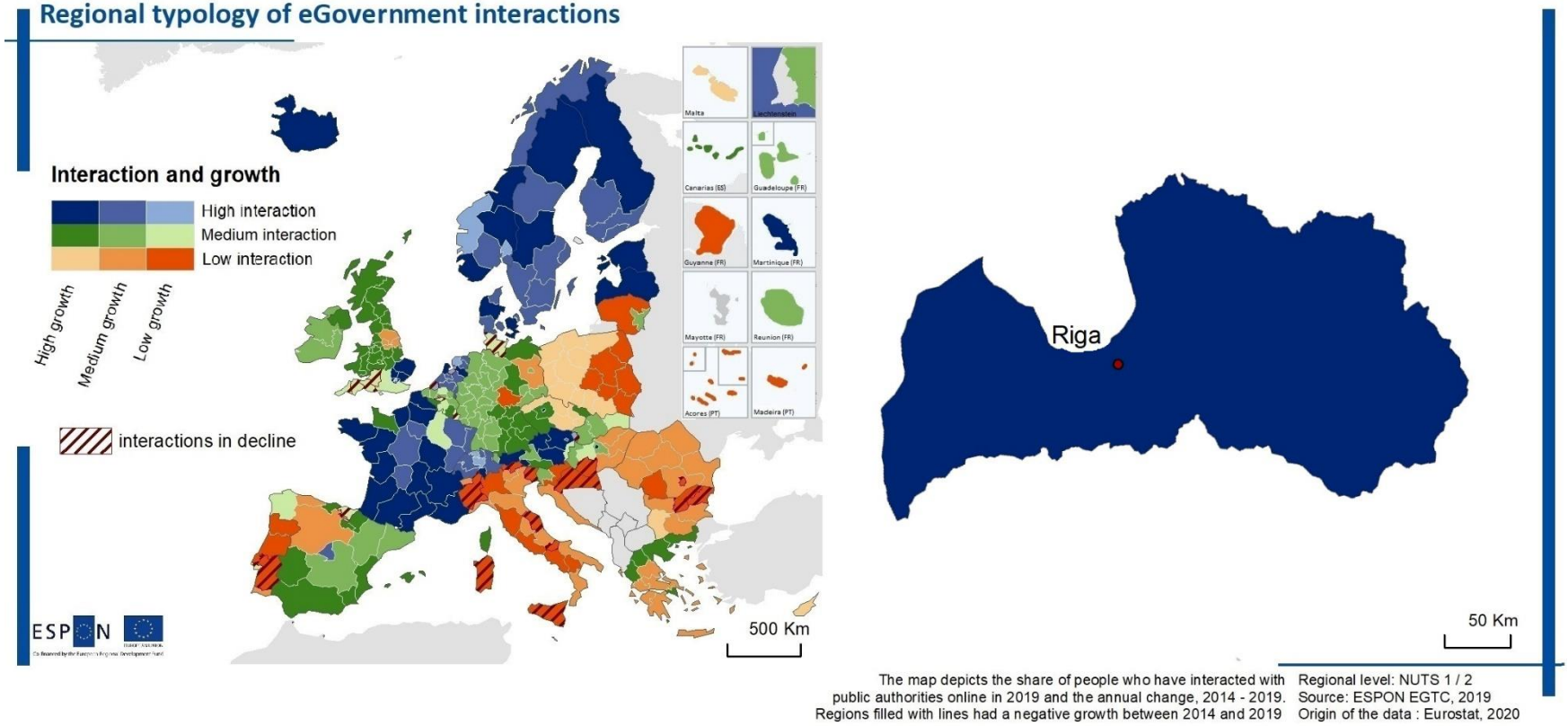
Global accessibility and main airports



The combination of many airports and a dense road-railway infrastructure results in high global accessibility concentrated in central-western Europe. Air transport is important to global connectivity, both in continental Europe and in intercontinental travel. There has been a significant growth in air transport in the EU in the last few years. In 2018, intra-EU air transport had a share of 46% of the total air transport in the EU, extra-EU air transport was 37%, while the national share was 16%. London, Paris, Amsterdam, Frankfurt, and Madrid are the major global hubs in Europe.

Lately, the largest increases in air travel have been in Lithuania, Latvia, Poland, and Slovakia. Riga Airport is the largest and busiest airport in the Baltic countries. Before the start of the COVID-19 pandemic, it was increasing in range and travellers, although traffic remained relatively limited at the European scale. Riga Airport's strength is that the fairly new airport is located close to Riga city with its old city as the main attraction for tourists. In addition, Latvia's national airline, Air Baltic, has many connections in and out of Riga - not least to the east, which is why Riga (to some extent) acts as a hub between north-western Europe and Russia, and the other eastern countries.

Regional typology of eGovernment interactions



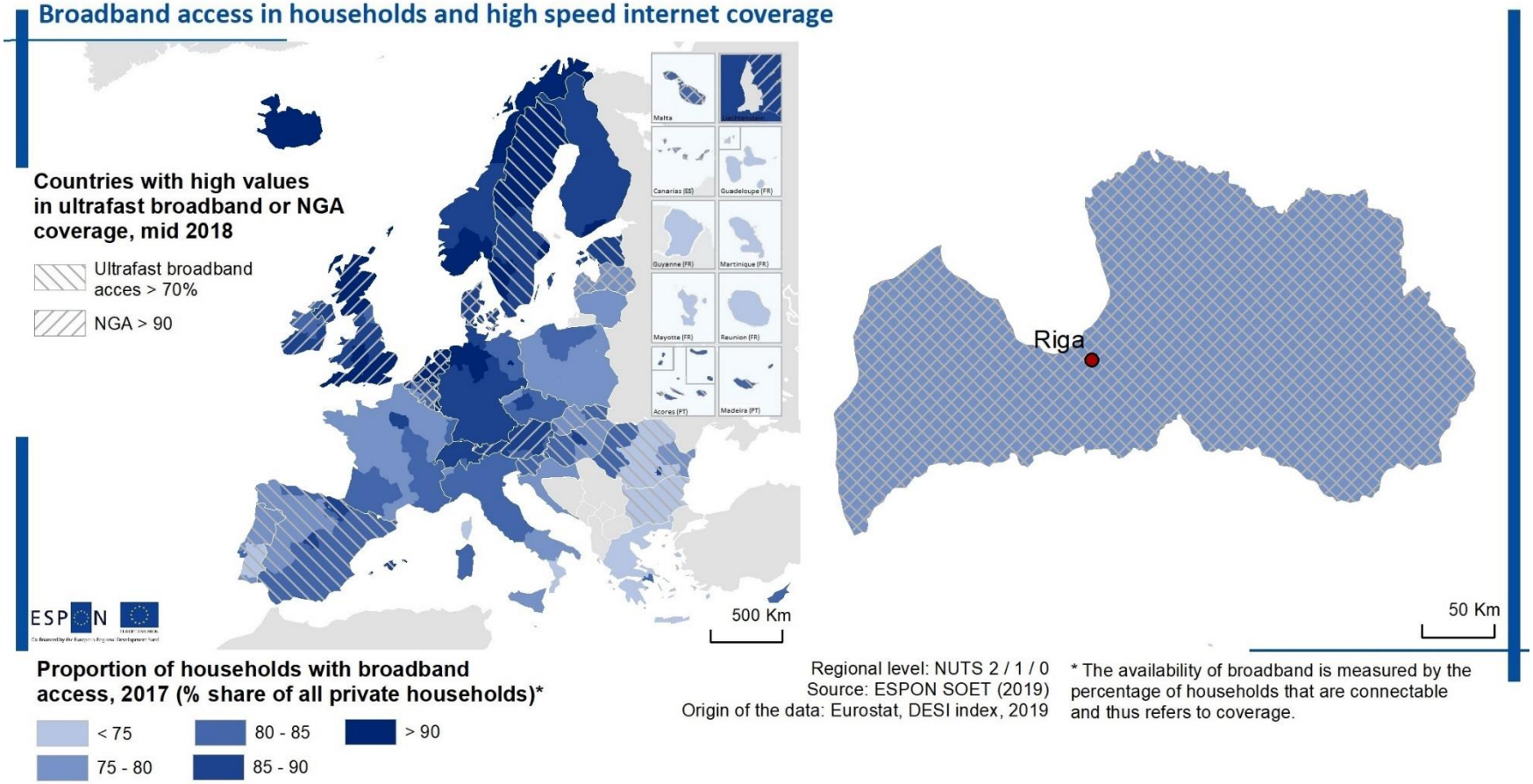
The map depicts the share of people who have interacted with public authorities online in 2019 and the annual change, 2014 - 2019. Regions filled with lines had a negative growth between 2014 and 2019

Regional level: NUTS 1 / 2
Source: ESPON EGTC, 2019
Origin of the data : Eurostat, 2020

Digital transformation is fundamental for the future of socio-economic growth in Europe. In the EU's eGovernment Action Plan the aim is to have open and efficient governments, interoperable digital public services for all citizens and businesses, and a base of infrastructure to support digital connectivity. Nordic cities generally have high e-government interactions, with e-government products being developed at a higher pace. Southern and eastern European cities have low activity in terms of both producing and using digital public services. Moreover, cities with over 500,000 inhabitants take more responsibility for providing digital services, showing more diversity in their services, while cities with under 250,000 inhabitants provide fewer e-government services.

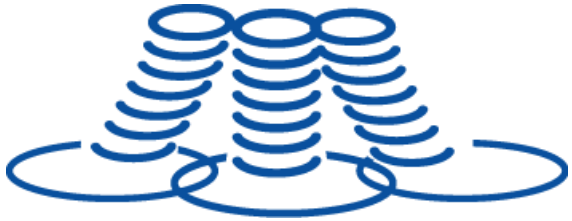
Together with the Nordic countries, Latvia is a frontrunner nation in eGovernment interactions and services. The creation of a successful digital multilevel governance system is well underway. This results in improved coordination between administrative levels and fair involvement of the private sector, which has an interest or can participate in co-creating and delivering new types of services. As indicated in the next map, Latvia is considered one of the countries with the fastest internet connection in the world. The total share of households with broadband access, however, is still lower than European average, which could indicate the current challenge to create equal eGovernment opportunities across all of Latvia.

Broadband access in households and high speed internet coverage



Broadband access and high-speed internet are considered essential to future competitiveness, connectivity, and inclusiveness. EU 2025 targets aim to ensure fast connections for schools, main public services, public transport hubs, and digital-intensive enterprises, and a minimum of 100 Mbps for all European households. In 2017, ultrafast broadband access was above 70% in Sweden, Denmark, Estonia, Latvia, the Lowlands, Spain, Portugal, Slovenia, Slovakia, Hungary, Romania, and Bulgaria. Access to Next Generation Access (NGA) broadband was above 90% in the UK, Denmark, the Lowlands, Latvia, and Austria. The share of households with broadband access was highest in central and northern Europe.

Latvia has experienced a significant growth in internet coverage starting in 1999. While access to the internet was costly in the first years, prices had dropped considerably by 2008. Latvia is nowadays known for being one of the countries with the fastest internet access in the world, with high values in ultrafast broadband or NGA coverage. However, the proportion of households with broadband access in Latvia has increased more slowly from 2014 (73%) to 2018 (79%) compared to other European regions. This non-universal coverage was recently highlighted due to COVID-19 as schools had to start teaching online. A new policy – the Digital Transformation Guidelines for 2021-2027 – is currently under evaluation to improve the situation.



Economy

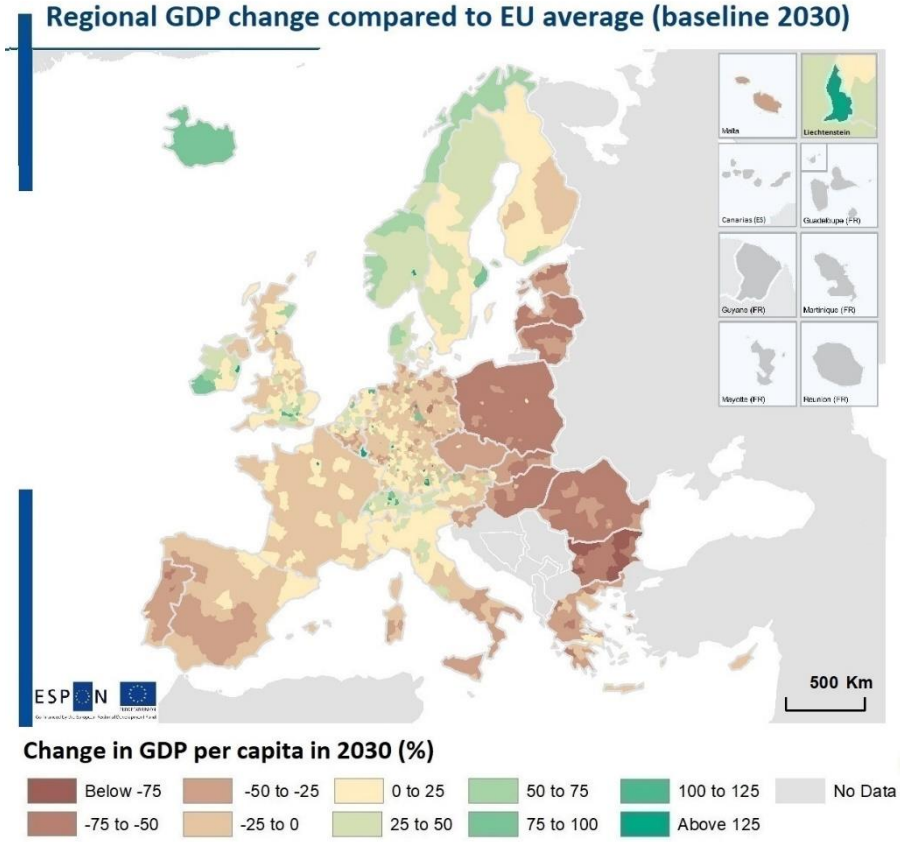
Potential GDP per capita in 2030

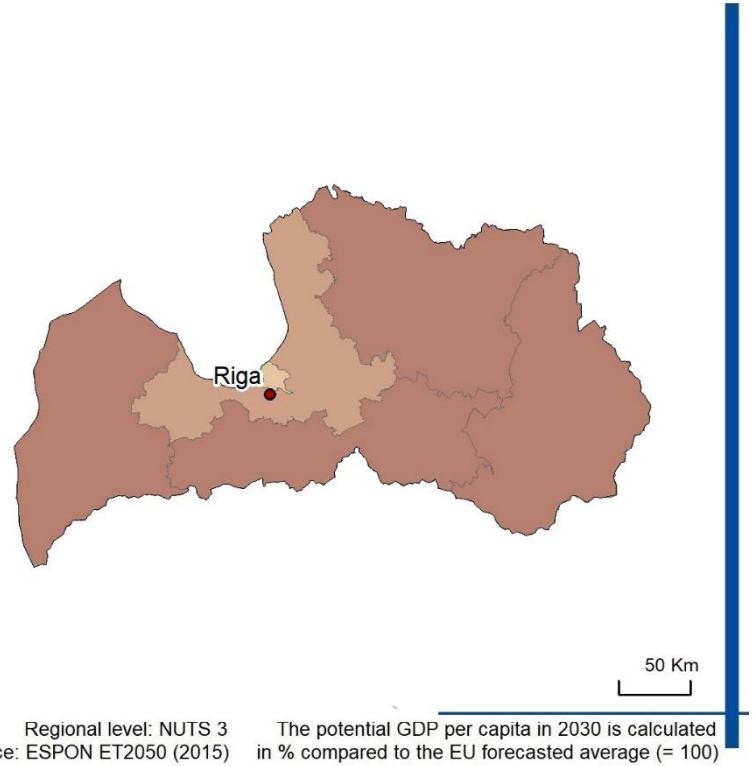
Regional innovation

Extra FDI inflows across Europe

Latvia is a small, open economy. Exports contribute to more than half of its GDP. Due to its geographical location, transit services are highly developed, along with timber and wood-processing, agriculture and food products, and machinery and electronics manufacturing. Latvia's low birth rate and decreasing population are major challenges to its long-term economic vitality.

Latvia's economy experienced a GDP growth of more than 10% per year during 2006-07 but entered a severe recession in 2008. Triggered by the collapse of the second largest bank, the GDP plunged by more than 14% in 2009 and, despite strong growth since 2011, the economy took until 2017 to return to pre-crisis levels in real terms. Latvia's GDP development is projected to be between 0%-50% lower in 2030 than the average regional GDP change in the EU.



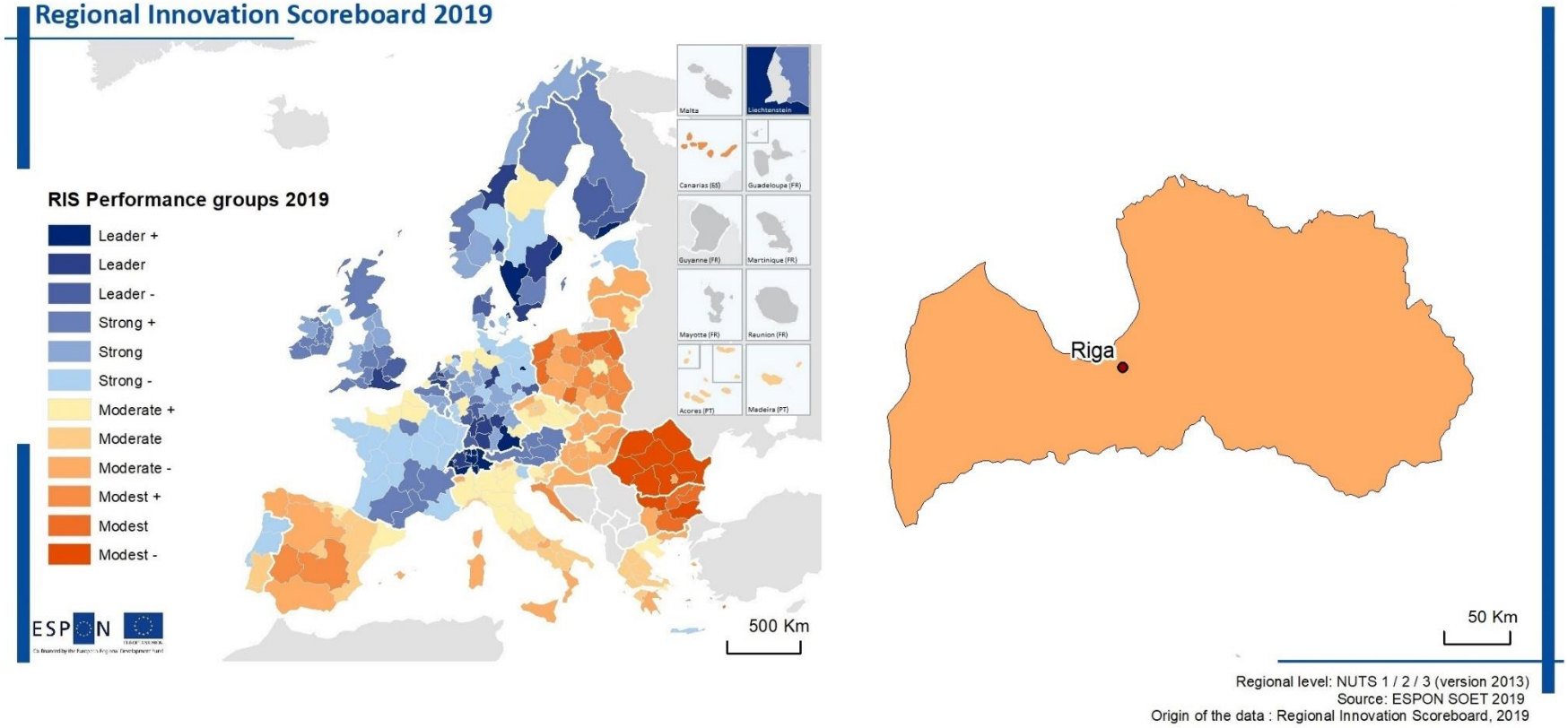


Regional level: NUTS 3
Source: ESPON ET2050 (2015)

The potential GDP per capita in 2030 is calculated in % compared to the EU forecasted average (= 100) according to the baseline scenario. This scenario assumes that current rends and policies will remain in the future.

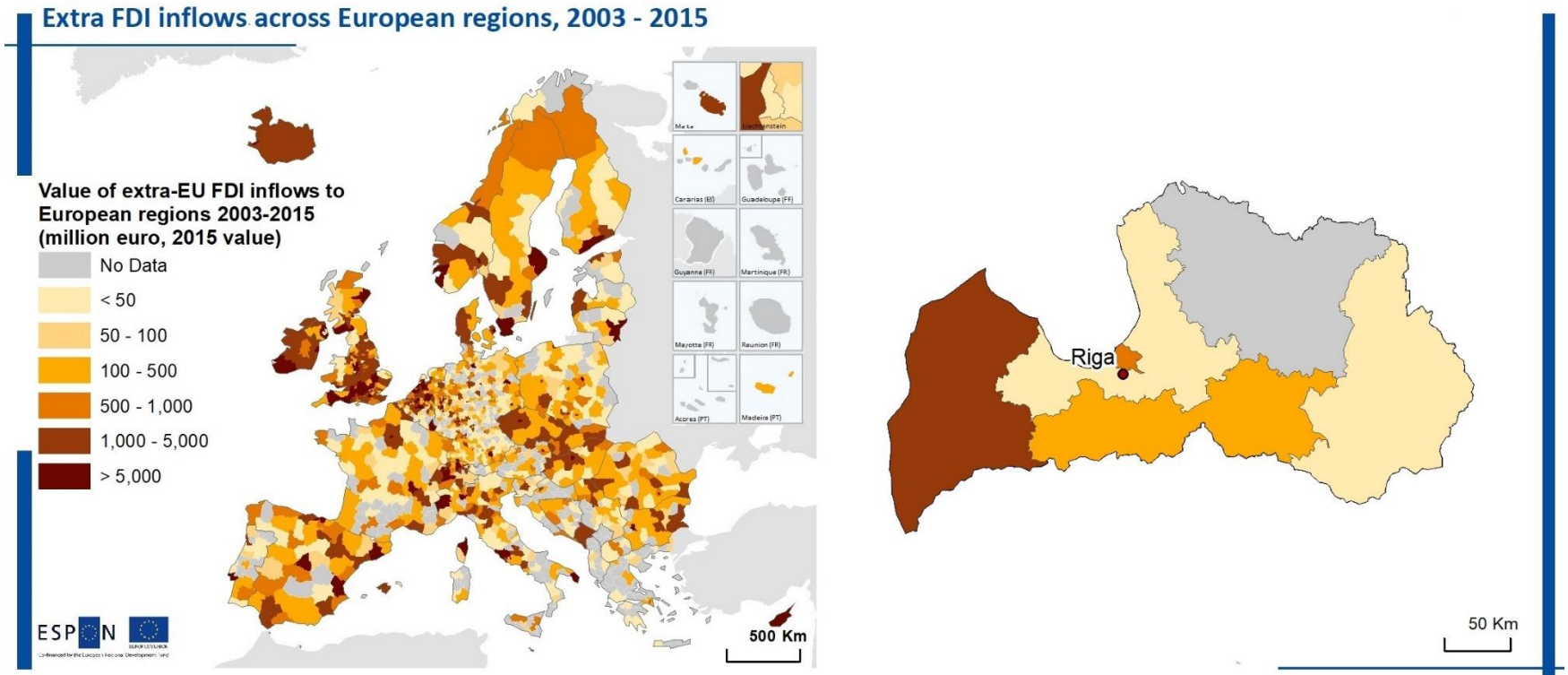
Based on contemporary observations, Europe's forecast for socio-economic development will retain a certain asymmetry. The existing imbalances are expected to be enhanced by jobless economic growth - which is partly linked to the role of the financial industry in generating economic growth, and partly to technological progress changing labour market needs - which is also reflected in the disparities of available household incomes. In Europe, the gaps between north and south and also between regions within countries are widening. These discrepancies are expected to persist in the coming decennium. However, high relative levels translate only slowly into the high absolute numbers needed for convergence (that GDP per capita grows at faster rates than in richer economies).

Latvia stands out as the Eastern European country hardest hit by the global financial crisis; it lost approximately 25% of its GDP between 2008 and 2010. Latvia returned to economic growth in the second half of 2010. Nevertheless, according to the ESPON ET2050 predictions, Latvia's GDP development is expected to be between 0%-50% lower in 2030 compared to the average regional GDP change in the EU. The social and economic consequences of an ageing population are likely to have profound consequences throughout Europe, and not least in Latvia and the other Baltic states. Emigration among younger citizens – with associated brain drain – also contributes to negative developments in Latvia's GDP (ESPON ET2050).



Striving towards technological change, staying ahead in the field, innovation, research, and development are important. These factors differ widely across Europe, as does the use of research results and innovation. While some regions host major centres for research and innovation, other regions are home to well-connected entrepreneurs, tuned in to translating innovations into new or improved goods and services. Regional innovation results have increased over time, and almost all regions in the northern and western parts of the EU are categorised as leaders or as strongly positioned in the Regional Innovation Scoreboard (RIS) in 2019. On the other hand – categorised with a moderate or modest position – are most regions of eastern and southern Europe.

Latvia belongs to the category of countries classified as "moderate" on the regional innovation scoreboard (RIS) in 2019. Latvia is thus (along with Lithuania) lower than the rest of the northern EU. Latvia's innovation profile can be described as a "creative area of imitation". The relatively high level of education in Latvia suggests that the country's innovation profile can be raised, despite emigration (with associated potential brain drain) that probably contributes to slowing innovation in the country. However, there are indications that these emigrants are slightly less skilled than the remaining population, which further establishes the capacity to improve innovation.



Regional level: NUTS 3
Source: The world in Europe, global flows towards Europe, 2017
Origin of the data: Copenhagen Economics based on BvD's Zephyr and the Financial Times databases, 2016

Deal value originating from outside Europe, both Greenfield projects and M&A deals (around half of the M&A deals did not have a reported deal value – the total deal value is reported for the GF and M&A projects that had a reported deal value).

Foreign direct investment (FDI) is considered as a key factor in economic growth. Generally, capital metropolitan regions are more likely to be attractive for FDI. This map shows the extra-EU inflows of greenfield investments in 2003-2015. These investments take place when a new foreign firm establishes itself in the region and sets up new production facilities, e.g. to access new markets or to reduce its costs of production. This type of FDI stimulates economic activity during the construction phase and expands the capital stock in the region. Greenfield investments tend to take place in emerging economies with expanding markets or in countries with an abundance of important resources and are more frequent in rural or peripheral areas. FDI originating outside Europe brings new capital to Europe, stimulates employment and boosts productivity in local firms.

Like in most EU countries, the FDI flows to Latvia have continuously increased upon its accession, reaching a peak in 2007. Since 2008, FDI has generally been in decline. According to the bank of Latvia, the biggest share of investment from outside the EU comes from Russia, accounting for 11% of the total intra- and extra-EU FDI combined[3]. The highest share of extra-EU FDI flows are located in the NUTS region of Kurzeme, followed by Riga, the capital. In Kurzeme, the Liepaja special economic zone and the Ventspils Free Port have attracted many inward investments and new businesses. These two ports are located in very advantageous places, both being connected with to transportation infrastructures and are ice-free in the winter. The most important sectors in that region are transport and communication, trade, machinery and electronics manufacturing[4].

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