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Central Baltic Regional Analysis

Central Baltic Programme 2021-2027

5th Draft Paper

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INTRODUCTION

This analysis has been compiled for the Central Baltic programme in purpose to support the programming work for the next programme period 2021-2027. With help of the analysis the regions' challenges are recognised, and the needs can be answered in the programme. The Working Group has been assisting in drafting and commenting the challenges. National thematic workshop results have been taken into account also when drafting the final challenges and obstacles.

The analysis contains information from various sources: Eurostat, OECD, national statistics bureaus of Central Baltic programme countries, United Nations, ministries of Central Baltic programme countries, European Commission, etc. Newest possible information and statistics has been strived to use in the analysis.

Writing and compiling of the analysis started at February 2020 just before the Covid-19 pandemic reached the Central Baltic regions. In that time there was no knowledge of how the virus will spread and how big the impact will be and how long the virus will effect on our lives. A majority of the information gathered is based on pre-virus situation. But the analysis also contains statistics during the Covid-19 situation and forecasts that takes into account the effects of the pandemic.

SWOT analysis based on the Regional Analysis of the Central Baltic programme

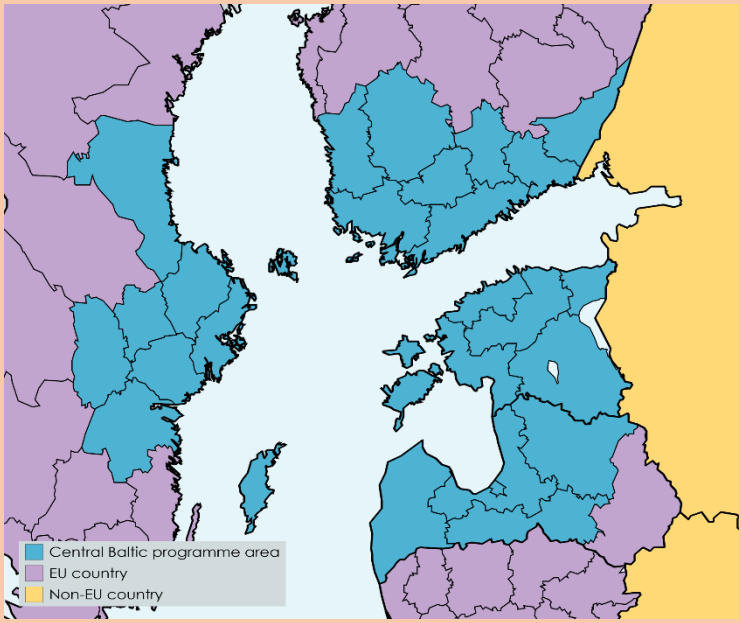
STRENGHTS	WEAKNESSES
• Central Baltic countries - important external trade partners - important tourism destinations for each other - foreign direct investment flows • Highly educated region, - tertiary education attainment level is high - qualitative higher education systems - good PISA reults • Presence of the Baltic Sea - connecting the region - unifying factor, shared identity - proximity to Russia • Mobility in the region - shared labour market - role of higher education institutions - vivid start-up hubs - intensive maritime connection networks - TEN-T network connecting the region outside the EU • Very high level of ICT usage	• Peripheral location of the Central Baltic region compared to other important regional and global centers - difficult accessibility on sparsely populated areas and isolated areas (islands and archipelago) - difficulties to sustain air transport services to least accessible regions • Large disparities of socio-economic development between Nordic and Baltic countries • Rural and peripherial areas lag behind • Low population density increases the costs of providing public services especially in peripheral areas • Different levels of economic development • Ageing population • Status of the Baltic Sea - High nutrient concentrations, decreasing biodiversity, increasing marine litter, low water quality • Mobility outside of the region - brain drain - decrease in population
OPPORTUNITIES	**THREATS**
• Potential development of the Central Baltic metropolitan areas for global competitiveness (including the capital cities) • Potential for new business development in the context of emerging start-up ecosystem • Great potential of circular economy • Well educated population combined with innovativeness of SME's and high capacity of ICT • Potential of using the physical digital infrastructure more advanced • Increase in elderly population healthy life expectancy	• COVID-19 pandemic impact on different sectors • Inefficiencies in the labour market - Mismatch of skills and job needed - How to translate the competitive skills and future labour market needs into education • Smart specialization strategies lack of proper resources for implementation and coordination • Lack of cross-border planning in various sectors • Lack of public sectors digital solutions • Increase in regional disparities

CENTRAL BALTIC COOPERATION AREA AND LOCATION

In continuation of the 2014-2020 cooperation, the participating regions in the Central Baltic Programme 2021-2027 (hereafter CB 2021-2027) are situated in Estonia, Finland including Åland[1], Latvia and Sweden. In total there are 27 regions in the programme area (according to the EU NUTS 3 classification) that are seen at the Table 1.

Table 1. The Central Baltic Programme 2021-2027 areas by NUTS 3 regions

Country	NUTS III Regions, Programme Area
Estonia (EE)	1. Kesk-Eesti (EE006) 2. Kirde-Eesti (EE007) 3. Lääne-Eesti (EE004) 4. Põhja-Eesti (EE001) 5. Lõuna – Eesti (EE008)
Finland (FI)	6. Kymenlaakso (FI1C4) 7. Satakunta (FI196) 8. Helsinki-Uusimaa (FI1B1) 9. Varsinais-Suomi (FI1C1) 10. Etelä-Karjala (FI1C5) 11. Kanta-Häme (FI1C2) 12.Pirkanmaa (FI197) 13. Päijät-Häme (FI1C3)
	14. Åland (autonomy) (FI200)
Latvia (LV)	15. Kurzeme (LV003) 16. Pieriga (LV007) 17. Riga (LV006) 18. Vidzeme (LV008) 19. Zemgale (LV009)
Sweden (SE)	20. Gotlands län (SE214) 21. Gävleborgs län (SE313) 22. Stockholms län (SE110) 23. Södermanlands län (SE122) 24. Uppsala län (SE121) 25. Östergötlands län (SE123) 26. Västmanlands län (SE125) 27. Örebro län (SE124)



The Central Baltic area is located in the North-Eastern part of the European Union, uniting Nordic countries Sweden and Finland with two Baltic countries Estonia and Latvia. The region is relatively distant (in terms of location) from the European main population and economic centres. The Central Baltic Programme area includes coastal regions of all programme countries for which the Baltic Sea is an important water body. The Baltic Sea has united the countries over centuries forming a basis for important and strong economic and cultural relations. The Central Baltic cooperation area is a neighbouring region to Russian Federation.

The Central Baltic area covers 251 185 km² which is 6% of the total land area of European Union (EU-27, not including UK) (EUROSTAT, 2020). The Programme area includes four metropolitan regions of the capital cities Stockholm, Helsinki, Tallinn and Riga. These are all located at the coastal area of the Baltic Sea and are relatively well connected with each other and with the European and global economic centres. On the other hand, there are large territories of peripheral, isolated islands and rural regions, for which accessibility inside the region, as well as with the European social and economic centres is a challenge.

[1] Åland is an autonomous, demilitarised, Swedish speaking region of Finland. Due to the constitutional status and legislative power in the relevant areas Åland will be mentioned at the same time as Member States.

The Central Baltic Programme area covers very diverse regions: there are highly developed, well connected, intensely populated cities and in turn less developed peripheral (in terms of location and accessibility), sparsely populated rural, islands and archipelago regions.

CHALLENGES AND OBSTACLES

- Central Baltic region's peripheral location in the European Union. The region is far from the main European centres of consumption and economic activity.
    - The North-South transport corridors connecting region to Central Europe are underdeveloped.
    - Large parts of the region are located on Eastern border of the EU and are impacted by unstable East-West transit flows.
- Accessibility within the Central Baltic region as the region is large, sparsely populated and in some parts isolated (islands and archipelagos).
    - Access of the sparsely populated areas with large urban centres of the Central Baltic region.
    - Access with and within islands and archipelagos areas.
- Underexploited potential of the large Central Baltic metropolitan areas (including four of capital cities) for global competitiveness.

POPULATION

The total population of the programme area is 10,8 million inhabitants which covers 2,5% of the total population of the European Union (EU 27) (Eurostat, 2019). More detailed information about population and population indicators in Annex 1 and Annex 2 in the end of this report.

In terms of population density, there are high differences between the regions, where the urban areas are considerably more populated than rural territories. The capital regions are naturally the most populated regions and Stockholm being the most densely populated capital city compared to other CB capitals (Tallinn 2597 inhab./km², Riga 2110 inhab./km², Helsinki 2986 inhab./km², Stockholm 4875 inhab./km²) The average population density (excluding Riga as an outlier, as it is the only capital city being included in the sample as separate NUTS 3 region) is 51,4 inhab./km^2. It is relatively low when compared to the EU 27 average population density of 108,6 inhab./km2. (Eurostat 2017) More detailed information about population and population indicators in Annex 1 and Annex 2 in the end of this analysis.

Population change

Compared to 2014 in total there are 334 604 more habitants in the region in 2019 (Eurostat, 2020). Figure 1 illustrates how Central Baltic regions differ in population change with growing numbers in most regions of Finland but also declining in many regions. Population is also growing in most regions in Sweden and decreasing in Estonia (except in Põhja-Eesti) and Latvia.

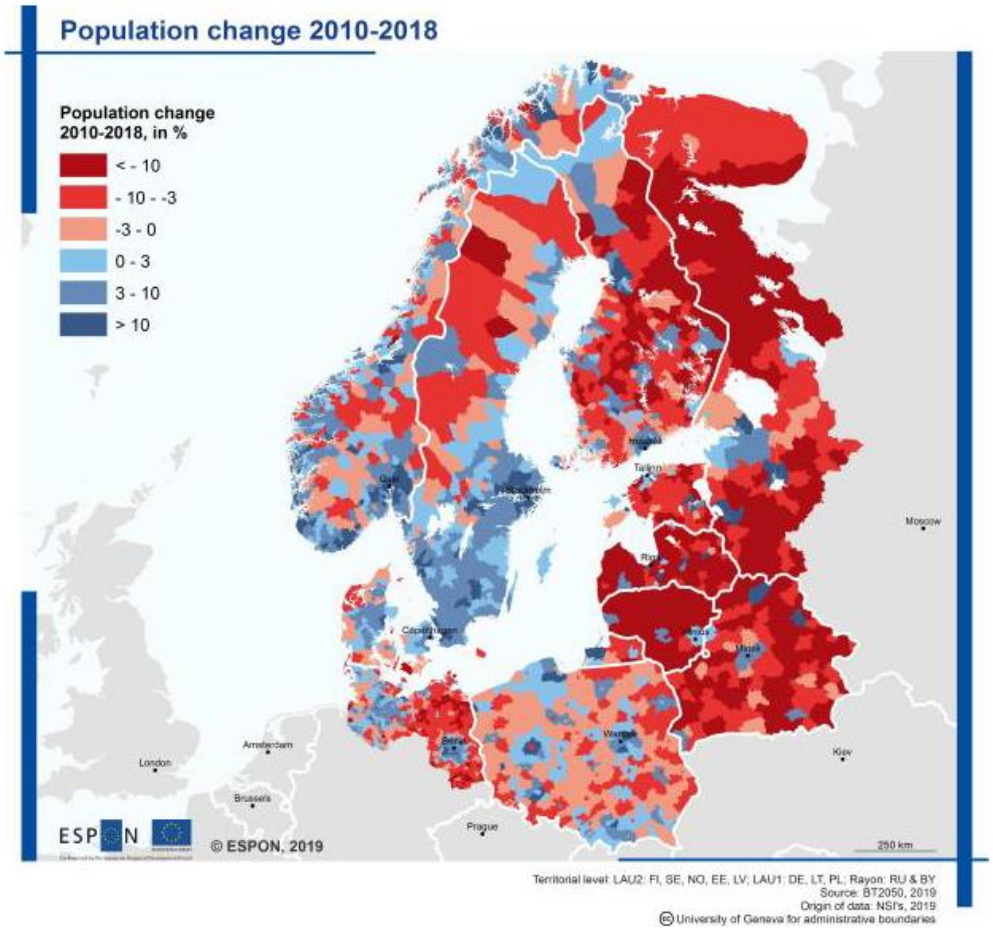


Figure 1. Total population change, 2010-2018. (ESPON 2019)

Natural increase and migration are the main causes for the population changes. Natural change of the population is calculated as the difference between total number of births and deaths within a given year. The natural change is negative when the number of deaths exceeds the number of births and the change is positive when the number of births exceeds the number of deaths. In order to compare different regions, crude rates are calculated, taking into account the population numbers (crude rate = ("nominal value"/population figure) *1000, indicating the value per 1000 people).

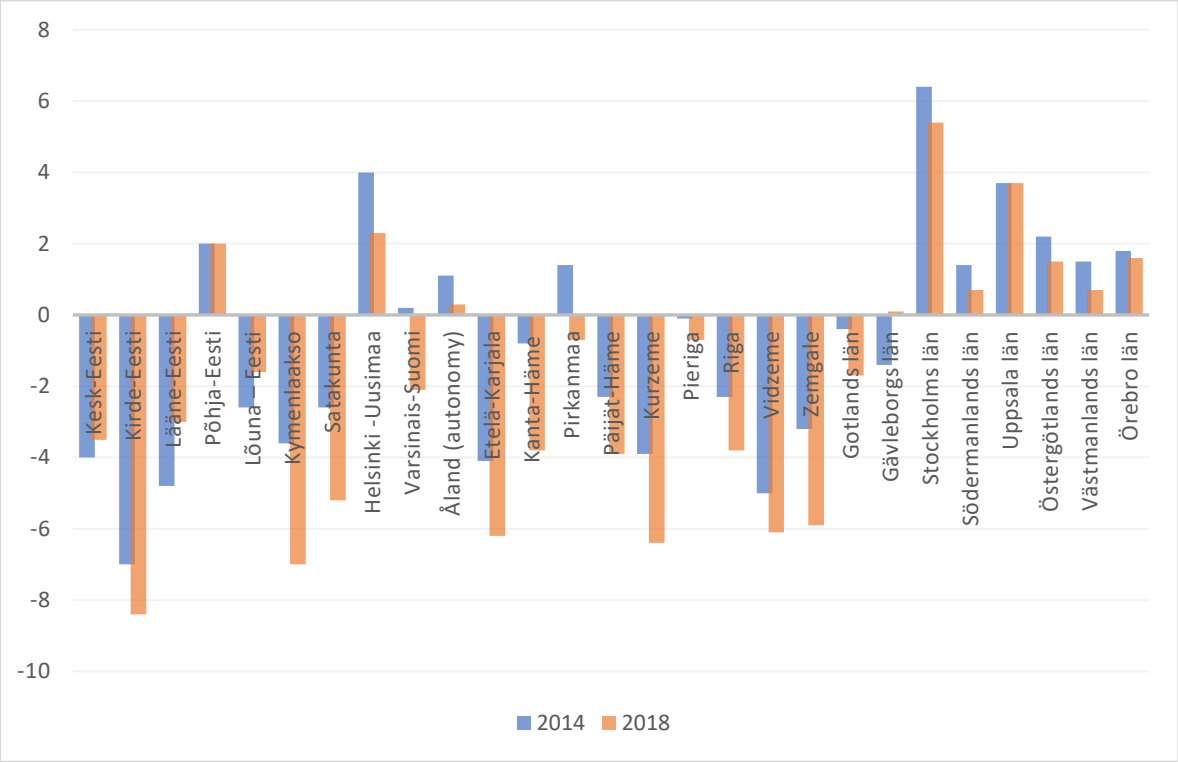


Figure 2. Crude rate of natural change (Source: Eurostat, 2020)

As illustrated in figure 2 rates of natural increase are negative for almost all of the Central Baltic regions (for nominal values see Annex 2). Põhja-Eesti in Estonia, Helsinki-Uusimaa, Åland and Pirkanmaa in Finland and almost all counties in Sweden are regions with positive natural increase. The largest decrease since 2014 in natural change are in Kesk-Eesti, Kirde-Eesti and Lääne-Eesti in Estonia, Kymenlaakso and Etelä-Karjala in Finland and Kurzeme, Vidzeme and Zemgale in Latvia.

Migration is defined as a cross-border change of the permanent place of residence from one settlement unit to another. Accordingly, the net migration is calculated as difference between numbers of immigrated and emigrated persons. Figure 3 illustrates the crude rates of net migration (calculations are identical to the crude rates of natural change explained above). Most of the regions of Estonia and Latvia experience negative migration. Half of the Finnish regions experience positive migration and half negative, but Swedish regions experience all positive rates.

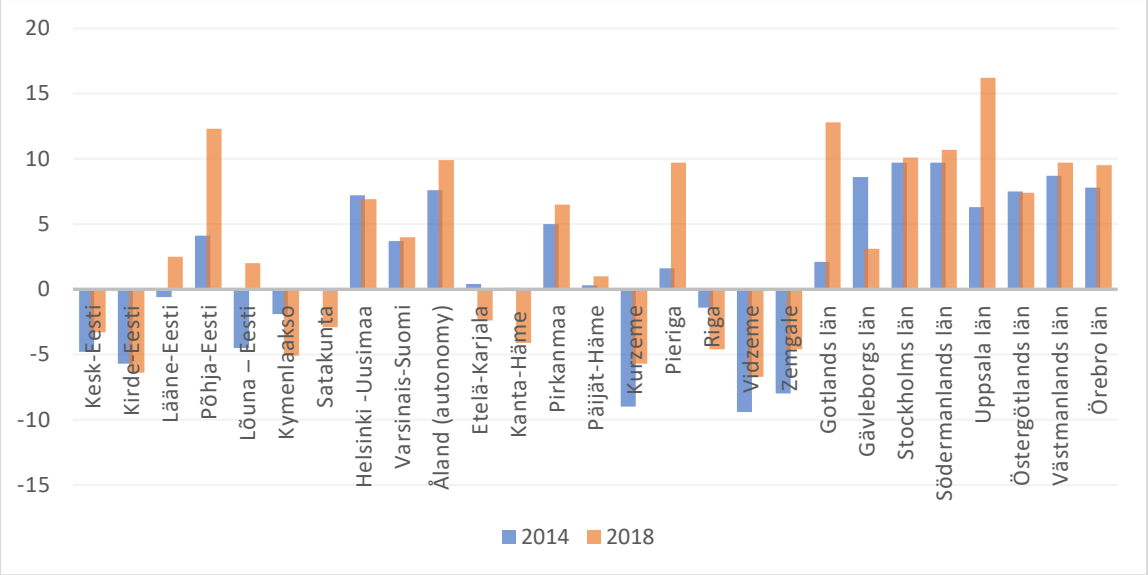


Figure 3. Crude rate of net migration (Source: Eurostat, 2020)

Population projections

The Europop2018 (Eurostat Population Projections 2018-based) calculates and summarizes the statistical information on population projections at national level. The methodology for projections takes into account major demographic indicators: the total fertility rate (the mean number of children that would be born alive by a woman during her lifetime if she were to pass through her childbearing years conforming to the fertility rates by age of a given year), life expectancy at birth (the mean number of years that a new born child is expected to live if subjected throughout his or her life to the current mortality conditions), and net migration (the difference between the number of immigrants and the number of emigrants) (Reference Metadata in Euro SDMX Metadata Structure (ESMS), 2018).

For Central Baltic region countries, it is projected that all countries' population, except Sweden, will start to decline (see figure 4). Only in Sweden the population will grow.

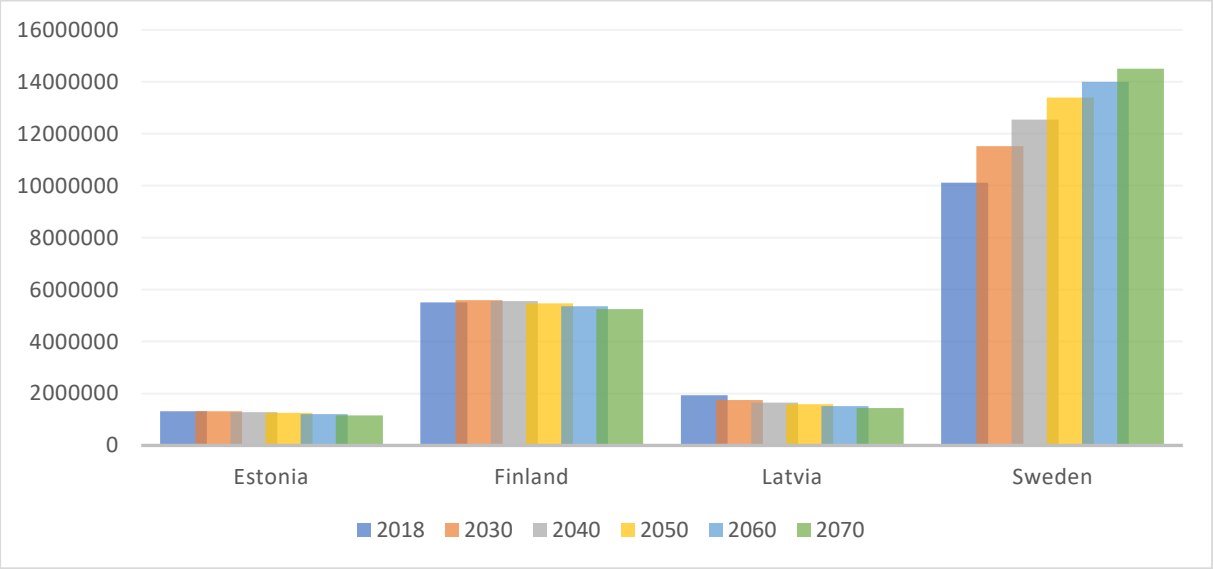


Figure 4. Change in population, in 10 year periods until 2070, projected (Eurostat, 2020)

All the Central Baltic countries will experience an ageing population challenge in the future, where a share of people aged 65+ (assuming it as the starting retirement age) continues to increase year by year. In addition, according to the dependency ratio calculations, measuring the ratio of the *not-active* or *dependant* (not in labour force) population part (those aged under 14, and over 65) over the *active* or *independent* population. The higher the ratio is, the larger the pressure is to the productive population. It is forecasted that dependency ratio will continue to increase for the entire Central Baltic region within a time period of 2018 – 2070 (see Figure 5).

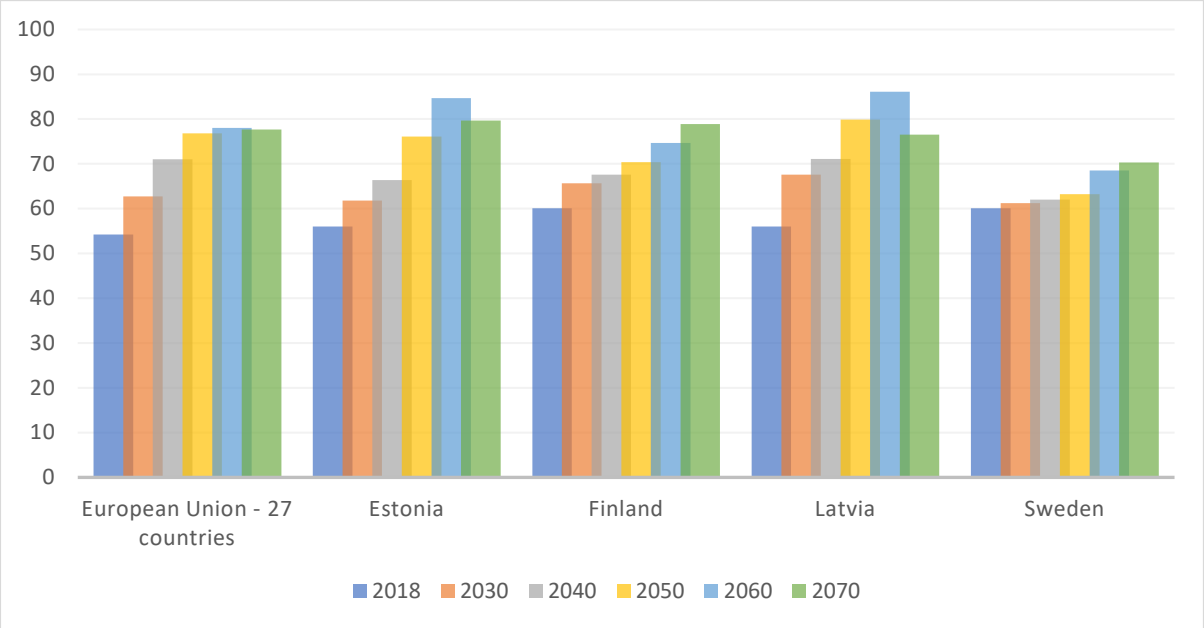


Figure 5. Projection for dependency rations 2018-2070 (Eurostat, 2020)

Ageing population is not just an issue for Central Baltic countries, but the share of persons aged 65 or over make up the world's fastest growing age group. Virtually all countries are anticipating an increase in the percentage of older people in their populations. The global trends show that the total fertility dropped by half from five children per woman in 1950-1955 to 2.5 children in 2015-2020, and it is expected to continue to decline. Life expectancy at birth has risen substantially across the world. In 2015-2020, life expectancy is 78 years in developed countries and 68 years in developing regions. By 2045-2050, new-borns can expect to live to 83 years in developed regions and 72 years in developing regions. (UN World Population Prospects 2019)

CHALLENGES AND OBSTACLES

- Ageing population is a general challenge as there will be less working age people to support social costs.
    - Involving older people (65+) into labour market.
    - Improving the life quality of the elderly people – longer active and independent life.
    - Exploiting the opportunities of developing services for elderly (silver economy).
    - Using the potential of the elderly people as the source for entrepreneurship and activating civic society.
- Regions outside of capital cities/metropolitan areas with decreasing population.
- In all countries capital city regions are growing, peripheral areas are mainly decreasing in population.

EDUCATION

The Central Baltic is a highly educated region, where the number of people (here expressed via Europe 2020 target indicator accounting for the share of 30-34-year-olds completing tertiary education, ISCED level 5-6[2]) exceeds the EU 27 average level (figure 6). The largest figures of 63,4% and 54,7% is for capital regions Stockholm and Helsinki-Uusimaa respectively, followed by Östra Mellansverige, Norra Mellansverige and Eesti regions.

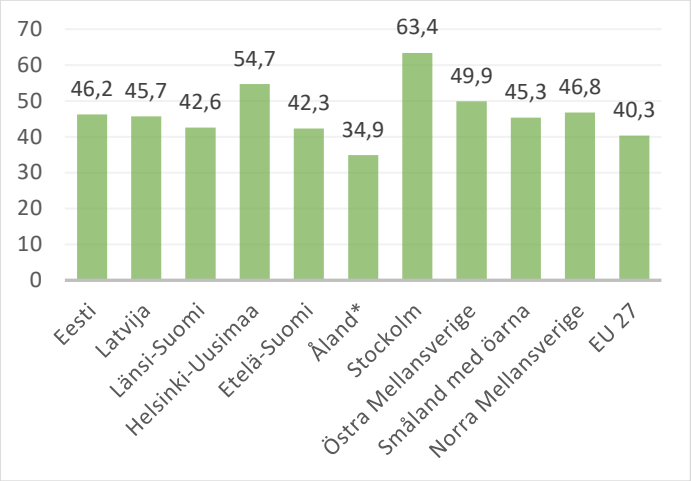


*Figure 6. Persons aged 30-34 with tertiary education attainment, 2019 (Eurostat 2020) *Åland statistic from 2018*

Tertiary educational attainment is one of the Europe 2020 target indicators, in particular, to have at least 40% those completed the ISCED levels 5 and 6. As indicated in the figure 13, the EU is on track towards reaching the Europe 2020 targets on tertiary education attainment and all of the Central Baltic regions have exceeded this target except Åland.

One of the targets for the EU 2020 Strategy for the "smart growth" is to reduce school drop-out rates below 10%. Early leavers from education and training (formerly 'early school leavers') denotes the percentage of the population aged 18-24 having attained at most lower secondary education and not being involved in further education or training.

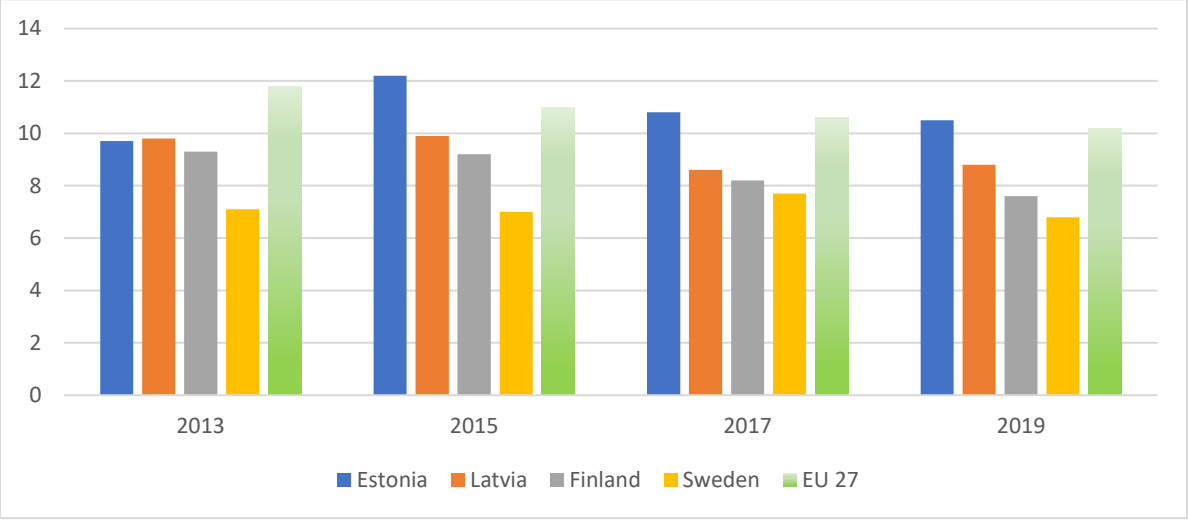


Figure 7. Early leavers from education and training, % (Eurostat 2020)

The share of early leavers from education and training has fallen continuously since 2002 in EU. The fall from 17% in 2002 to 10.6% in 2017 represents a clear progress towards the 'Europe 2020' headline

[2] ISCED - International Standard Classification of Education. ISCED level 5 – first stage of tertiary education (not leading directly to an advanced research qualification). ISCED level 6 - second stage of tertiary education (leading to an advanced research qualification)

target of 10%. Among the Central Baltic regions, lowest rates belong to regions of Sweden (Middle-East regions) and Western regions of Finland. Latvia is also below the target value; Estonia's rates rose in 2015 but started to decrease since (see figure 7).

There are also top-level universities within the region (mostly located in region's urban areas), which has been recognized by several international university ratings (see Annex 6).

However, regarding the total number of universities in the region, the number of those universities being rated by international rating agencies is small. For example, there are in total 39 universities in Sweden (Study in Sweden 2020), 13 universities and 22 universities of applied sciences in Finland (Finnish Ministry of Education and Culture 2020), 48 institutions offering higher education in Latvia (Latvian Ministry of Education and Science 2020), and 19 institutions offering higher education in Estonia (Study in Estonia, 2020). [3]

PISA assessment

PISA is the OECD's Programme for International Student Assessment. PISA measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges.

In 2018 students in Estonia and Finland are among the top performers in reading, mathematics and science and Sweden is not far behind them. Compared to the OECD average all the countries are above in mathematics, Latvian and Swedish results being stable compared to previous year, Estonian results have a positive trend and in Finland the trend is negative. Almost all are above average in science, only Latvia is slight below the average and all other countries have stable results compared to previous year but in Finland the trend is negative. In reading there are biggest differences. Finland and Estonia are in the same level and Estonia has positive trend and Finland negative. Latvia is slight below average, and the result is stable compared to previous year and Sweden is above average and the trend is negative. (PISA 2020)

Believing in a growth mindset is high in Central Baltic countries. In Estonia and Latvia at least 70% of students believed in growth mindset and at least 60% in Finland and Sweden. Students' life satisfaction was higher than OECD average in Estonia, Latvia and Finland. In Sweden it was 0,03 points below the OECD average. In all countries the performance variation between schools was lower than the OECD average. In Estonia, Finland, and Sweden, average performance was higher than the OECD average while the relationship between socio-economic status and reading performance was weaker than the OECD average. Latvia is slight below average of reading but the relationship between socio-economic status and reading performance was weaker than the OECD average too. In all four countries gender gap in reading performance was bigger than OECD average. (PISA 2020)

Vocational education and training

Vocational education and training (VET) systems consist of initial and continuing VET. **Initial vocational education and training (I-VET)** is usually carried out at upper secondary level before students begin working life. It takes place either in a school-based environment (mainly in the classroom) or in a work-

[3] Data regarding the number of higher education institutions is not comparable across countries due to different data sources (with different HEIs classifications) used.

based setting, such as training centres and companies. **Continuing VET (C-VET)** takes place after initial education and training, or after beginning working life. It aims to upgrade knowledge, help citizens acquire new skills, retrain and further their personal and professional development. C-VET is largely work-based with the majority of learning taking place in a workplace. (European Commission definition)

In 2017, 47.8% of all upper secondary students in the EU were enrolled in vocational programmes. The share of upper secondary students undertaking vocational programmes varies considerably between the EU Member States. In table 2 is seen the figures of Central Baltic countries compared to EU 28.

Table 2. IVET students as % of all upper secondary students (European Centre for Development of Vocational Training 2019)

Country	2015	2017
European Union 28	47,3 %	47,8 %
Estonia	35,7 %	40,7 %
Latvia	39,8 %	38,6 %
Finland	71,3 %	71,6 %
Sweden	38,2 %	34,1 %

In 2015, in the EU, 40.8% of workers participated in employer sponsored CVET courses. Of Central Baltic countries Sweden has the highest participation with 52,2 % of workers and the lowest is Latvia with 27,2 % of workers as seen at table 3.

Table 3. Workers participating in CVET courses (%) (European Centre for Development of Vocational Training 2019)

Country	2010	2015
European Union 28	38,9 %	42,9 %
Estonia	30,6 %	31,9 %
Latvia	24,2 %	27,2 %
Finland	40,2 %	42,8 %
Sweden	47,1 %	52,2 %

Lifelong learning

One of the targets under the strategic framework for European cooperation and training (ET 2020) is that, at European level, an average of at least 15 % of adults should participate in lifelong learning by 2020. The latest results from the European Union (EU) labour force survey show that in 2019 the participation rate in the EU stood at 10.8 %, 0.3 percentage points below the rate for 2018. The rate has increased gradually since 2015, when it was 10.1 %. As seen in figure 8 Sweden, Finland and Estonia are in top 5 countries participating in adult learning in 2019. Latvia has the lowest rate among Central Baltic countries and is also below EU 27 average.

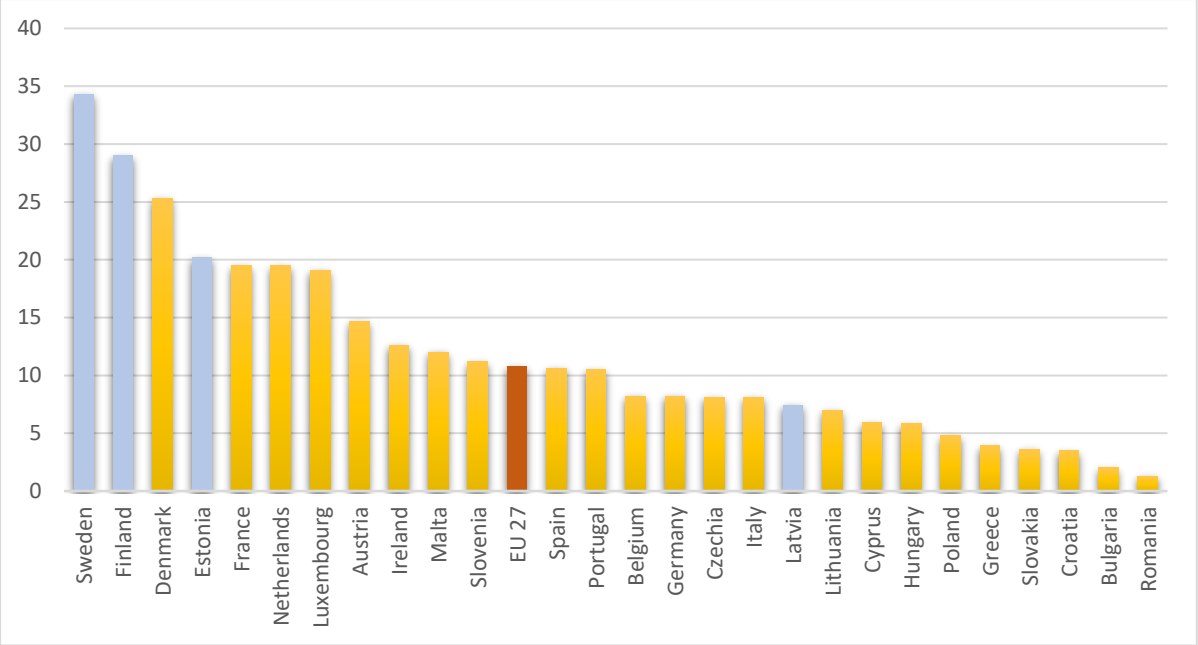


Figure 8. Participating in adult learning 2019, % (Eurostat 2020)

The skills required to enter and progress in the labour market are undergoing profound changes because of megatrends such as technological progress, new trade patterns and population ageing. This process is driven by shifts not only in the occupational structure of employment but also in changing skill requirements within each occupation. (OECD 2019)

Technological progress and the associated changes in work organisation are reshaping most occupations by altering the job tasks involved, with a rising demand for high-level cognitive and complex social-interaction skills. More jobs are part of global value chains, in which the different stages of production are spread across countries. Consequently, in advanced countries, high-level skills are becoming increasingly important for companies to specialise in the most technologically advanced activities. In parallel, employment relationships are changing as a result of these megatrends, leading to a rise in non-standard work and a reduction in job stability. More training opportunities will therefore be needed to facilitate labour mobility, but adult learning provision must also become more flexible and less tied to the traditional model of employer-provided training. Finally, population ageing means that individuals will need to maintain and update their skills over longer working lives. It is also likely to lead to a change in skill needs due to the associated shifts in demand for goods, services and qualified labour – notably healthcare professionals and elderly care personnel. (OECD 2019)

According to European Semester (2019 and 2020): Country Specific Recommendations / Council Recommendations all Central Baltic countries have their own recommendations for adult learning. But what is common for the countries is that they need to invest in adult learning and lifelong learning. Specially groups that are in danger to drift away from the labour market (long-term employed, people with outdated skills, disabled people, immigrants, people with partial work ability….) are in need for in-service training and retraining. Because of the COVID-19 pandemic impact to the labour market these groups are even in more danger to drift away from labour market.

Student mobility

The total number of international students in Finland, Latvia and Sweden exceeds the total number of local students studying abroad. As it is seen in figure 9, Sweden is the leader in terms of attracting incoming students, following by Finland. In Finland and Sweden, the number of students studying abroad has been decreasing between 2013 and 2017. The figure 9 regards all kinds of students; short-term studies, long-term studies, degree students. The information about Estonian outgoing students was not available.

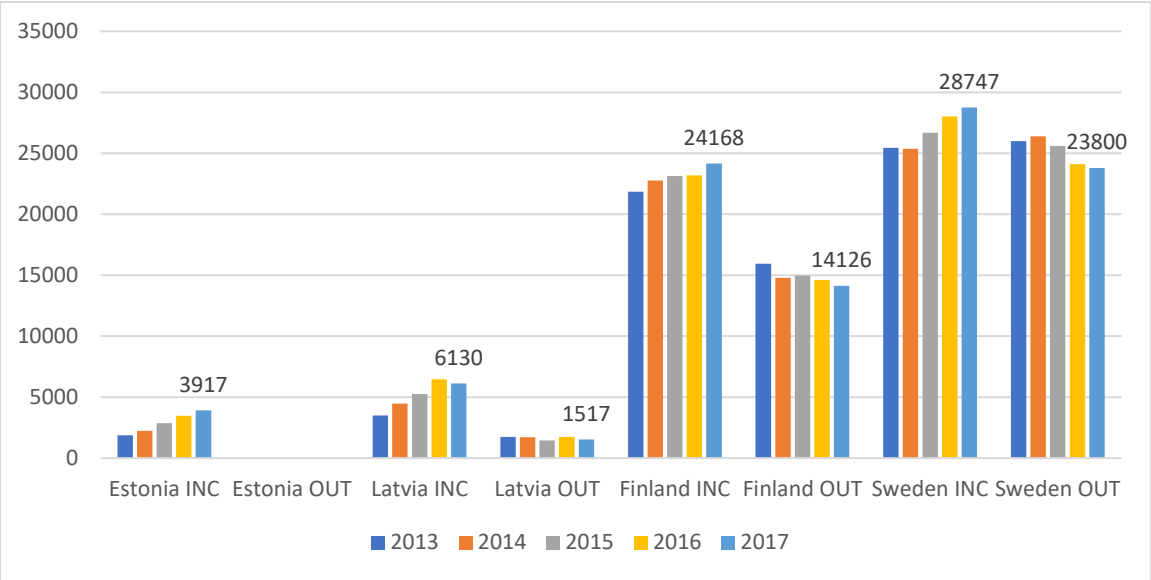


Figure 9. Student mobility in Central Baltic countries 2013-2017) (Eurostat, national statistics bureaus)

CHALLENGES AND OBSTACLES

- Early drop-outs from the schools of certain groups of youth leading to marginalization and lack of skills to compete on labour market.
- Access and the quality of the education for students with special needs and minorities.
- The traditional education is not addressing sufficiently the entrepreneurial attitude and entrepreneurship.
- Mismatch between skills taught by education system and skills needed by (future) labour market.
- Central Baltic universities lack critical weight to compete with European and global leaders of research, teaching and innovation.
- Vocational education providers have limited coordination of cross border needs.
- Brain drain from sparsely populated and peripheral areas of the Central Baltic region.
- Updating outdated education by lifelong learning for certain groups (Eg. educated elderly men, immigrants with high education).

LABOUR MARKET

Employment

Employment rate is calculated as the proportion of working age adults employed (here with working age between 15 and 64 years old).

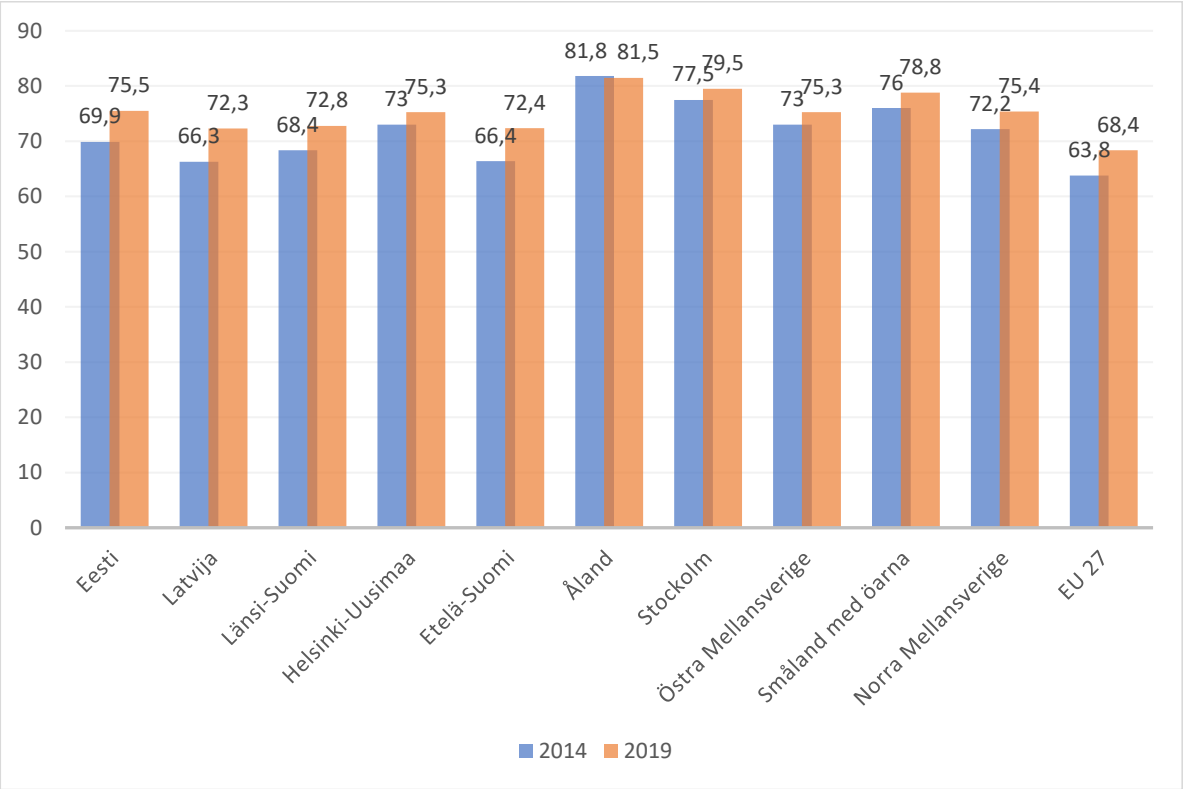


Figure 10. Employment rate at NUTS 2 level, years 2014 and 2019. (Eurostat, 2020)

As it is seen at the figure 10, the highest employment rates in 2019 are in Åland (81,5 %) and Stockholm (79,5 %) at Central Baltic regions at NUTS 2 level. There are quite small differences at the rates in Finland (excluding Åland), Estonia and Latvia. Sweden has highest employment rates of the CB countries. All the employment rates are still above the EU 27 average. Compared to year 2014 biggest difference at the employment rate are in Estonia, Latvia and Etelä-Suomi.

At Annex 3 there are employment statistics by type of activities. Such labour-intensive sectors as D. (wholesale, retail, transport accommodation, food service), B. (industry (including mining and quarrying, manufacturing, energy supply) and C. (construction) together are ones employing the largest share of employees in all the Central Baltic regions. Public sector (I) is also large sector at all areas of Central Baltic.

Unemployment

The unemployment rate is the number of people unemployed as a percentage of the labour force. The labour force is the total number of people employed and unemployed (aged 15 -74) (Eurostat definition).

In 2014 average unemployment figures for the respective Central Baltic region countries were 7,87 % and the figures has decreased to 6,03 % in 2019. The strongest decrease has been in Latvia, Länsi-Suomi, Etelä-Suomi and Estonia as seen in figure 11. Compared to EU 27, Norra Mellansverige and Östra Mellansverige have higher unemployment rates than average EU 27 in 2019. On country level the lowest rate was in Estonia (4,4 %) and Sweden (6,8 %) followed by Finland (6,7 %) and Latvia (6,3%) in 2019. The average EU 27 was 6,7 %.

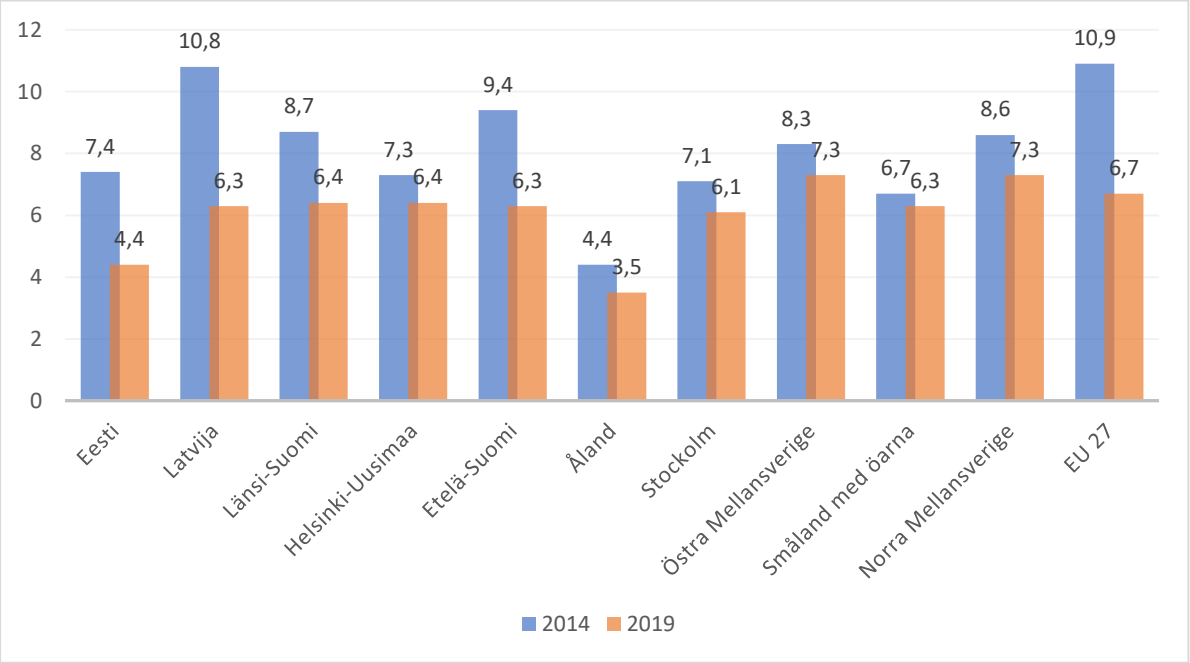


Figure 11. Unemployment rate at NUTS 2 level, years 2014 and 2018. (Eurostat 2020. Statistics and Research Åland 2020)

The COVID-19 pandemic has increased the unemployment figures in all CB countries in 2020. For the second quarter the unemployment figures were highest at Sweden (9,1 %) then in Finland (8,9 %), Latvia (8,6 %) and Estonia (7,1 %). The regional differences are large. As it is seen at the Annex 8 at the end of this analysis the capital regions have been suffering the most dramatic increase in unemployment. In all regions the unemployment figures have been increased but in some regions the increase has been more moderate (increase compared to January 2020 below 20%). The unemployment started to decrease in all regions in July or at the latest in August. (National employment bureaus 2020)

Long term unemployment

Long term unemployment figure takes into account those unemployed people that have been registered as active job seekers for more than 12 months (Eurostat definition). As showed in figure 12 below, the long term unemployment rate has decreased for Latvia and Estonia since 2013. All the regions of Sweden, Åland and Finland enjoy low long term unemployment rates, being also considerably below the EU 27 level. The latest Eurostat data on national level indicates that in 2019 the average long term unemployment rates were as follows: the highest rate of 2,4 % in Latvia, followed by Finland with 1,2 %, and Estonia, Sweden and Åland with 0,9 %, 0,9 % and 1,0 % respectively.

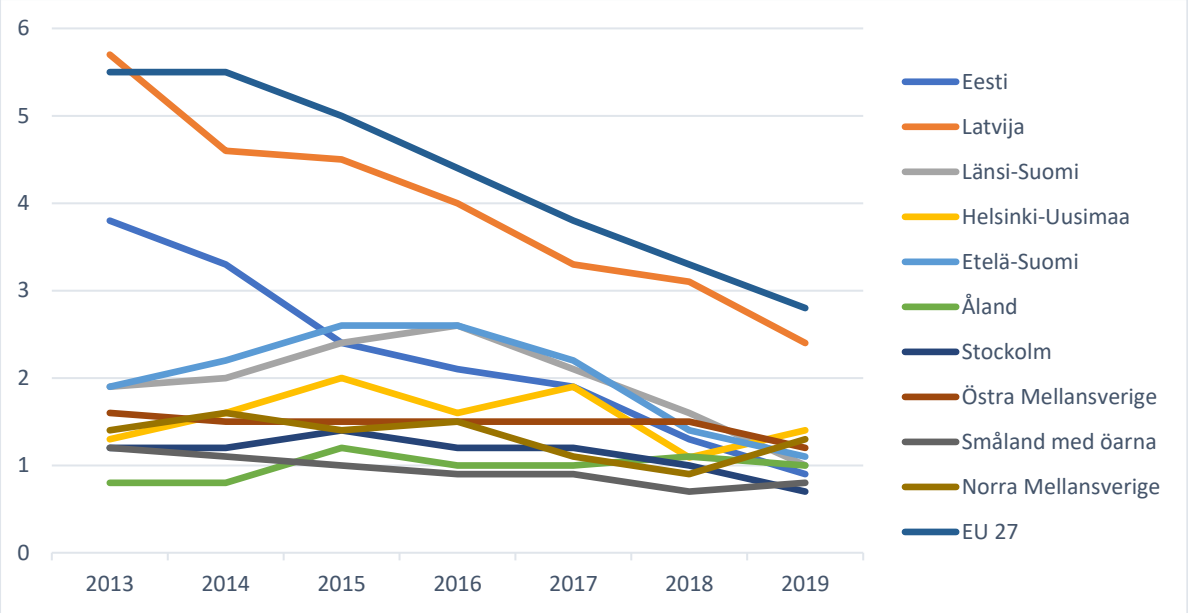


Figure 12. Long-term unemployment rates by NUTS 2 regions, % of active population (Eurostat 2020, Statistics and Research Åland 2020)

Youth unemployment

Youth unemployment rate is the percentage of the unemployed in the age group 15 to 24 years old compared to the total labour force (both employed and unemployed) in that age group. However, it should be remembered that a large share of people between these ages are outside the labour market (since many youths are studying full time and thus are not available for work), which explains why youth unemployment rates are generally higher than overall unemployment rates, or those of other age groups.

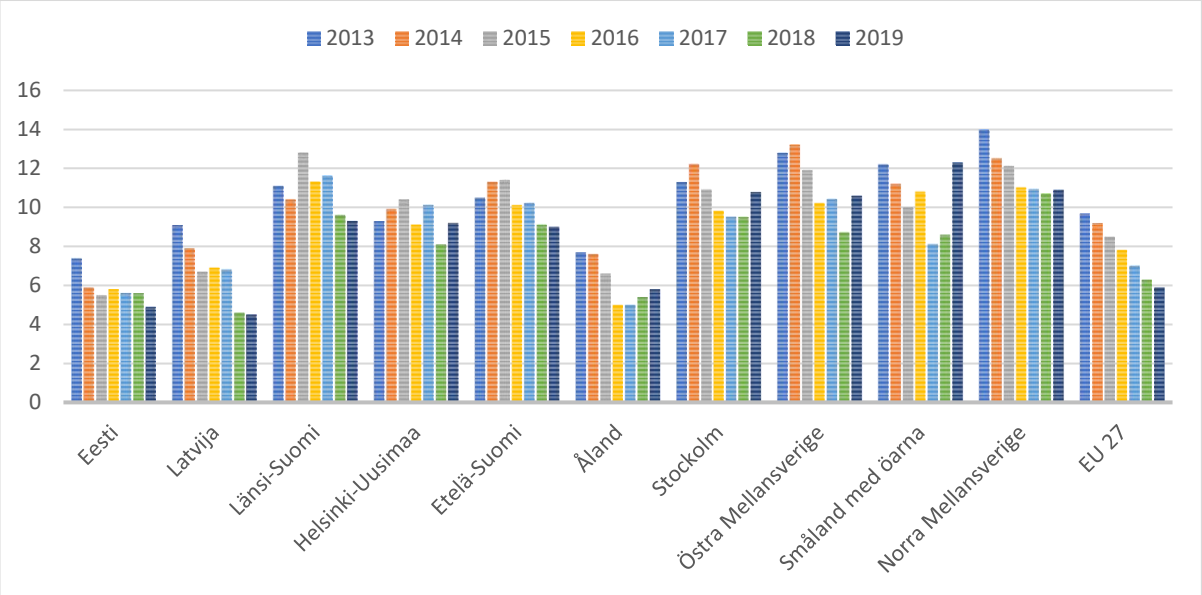


Figure 13. Youth employment rate by NUTS 2 regions, % (Eurostat 2020, Statistics and Research Åland 2020)

Young people face also specific challenges in the transition from school to work. Being new to the labour market they are less likely to find a job, or are often employed on temporary and part-time contracts. For this reason the youth unemployment ratio is often used: the percentage of unemployed young people compared to the total population of that age group (not only the active, but also the inactive such as students). (Eurostat 2020)

The youth unemployment figures fluctuate a lot between years 2013-2018 in all regions as it is seen at the figure 13. Only Estonia and Norra Mellansverige have had steady decrease in figures. In 2019 regions that are below EU 27 average are Estonia, Åland and Latvia.

Gender equality in employment

All the Central Baltic countries (including Åland as the top performer) can be characterized with a high involvement of women in labour market. The employment figures (calculated as the number of employed women per total number of women in population) for all of the countries exceeds the EU 27 average level and ranges from 74,5 % for Finland to 80,2 % for Sweden and even 81,8 % for Åland (see figure 14).

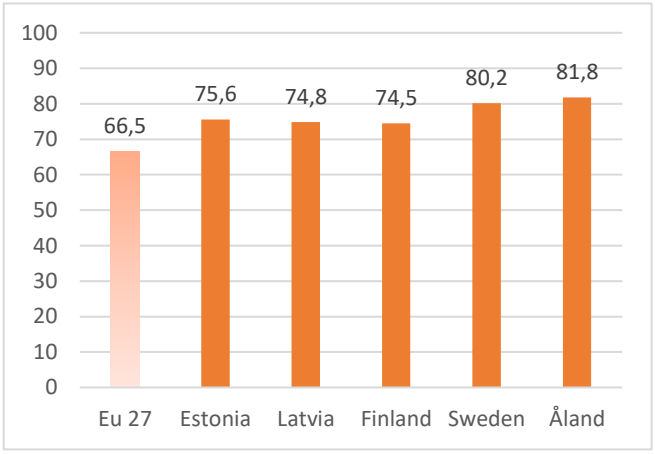


Figure 14. Female employment rate 2018, % (Eurostat 2020)

Moreover, figure 15 presents the gender employment gap. The gender employment gap is defined as the difference between the employment rates of men and women aged 20-64. All the Central Baltic countries (including Åland) are below the EU 27 average. The largest gap is in Åland (8,1 %) and Estonia (7,8 %) and the smallest is in Finland (3,7 %), Sweden and Latvia have the same figure 4,2 %.

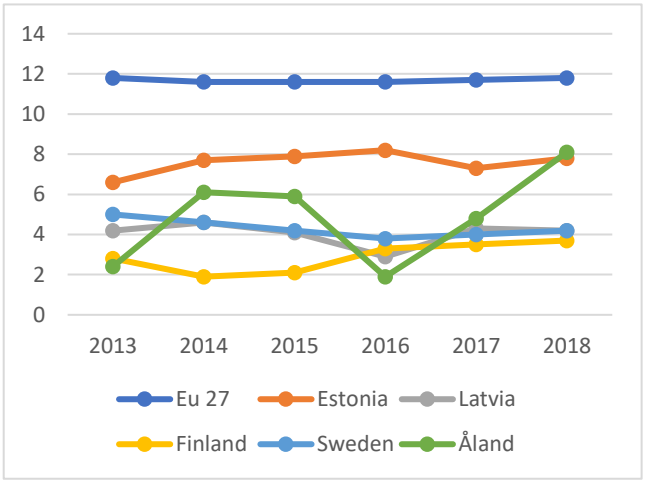


Figure 15. Gender employment gap, % (Eusostat 2020)

Apart from the employment figures, differences in income should be covered, too. The most widely measure indicating difference between men and women earning is a gender pay gap (GPG). The unadjusted Gender Pay Gap (GPG) represents the difference between average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees.

As seen in the figure 16, Estonia has the largest gender pay gap among the Central Baltic countries, accounting for 22,7 % whereas Sweden has the lowest figure of 12,2 %. But Estonia has experienced the sharpest decrease in gender pay gap by 5,4 % since 2014. In other countries the decreasing of the gap has been slower in five years.

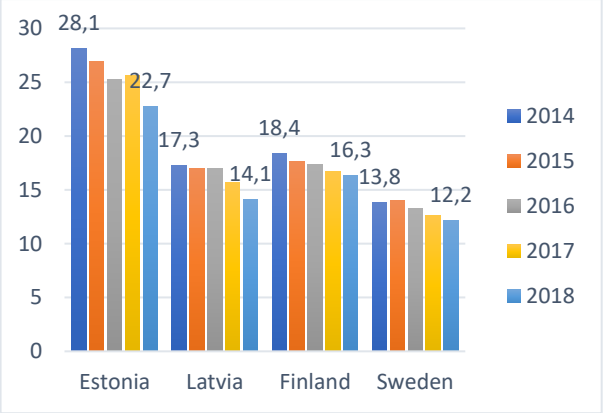
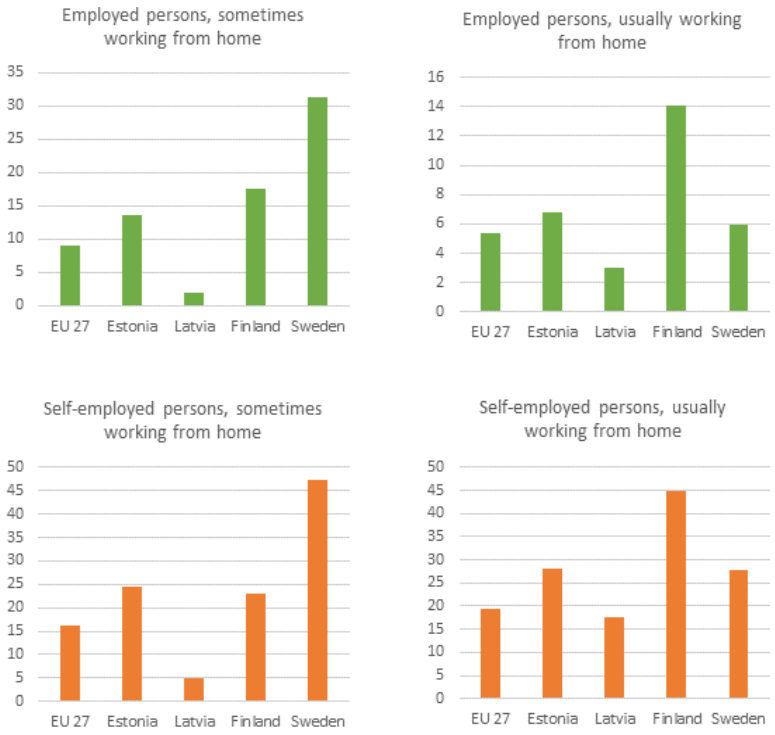


Figure 16. Gender pay gap in unadjusted form, % (Eurostat 2020)

Teleworking

New information and communication technologies have revolutionised work and life in the 21st century. Today's office work, and more broadly, knowledge work is supported by the internet and can be carried out from practically any location and at any time. This development has transformed the role of technology in the work environment, offering both new challenges and new opportunities. (Eurofound 2017)



In Central Baltic countries Finland and Sweden has the most employers who are working most from home sometimes and usually, as seen in the figure 17. The share of self-employed people who are working from home is bigger than employed persons. The share of teleworkers rose drastically during pandemic. The proportion of workers who started teleworking as a result of Covid-19 in Finland was 59 %, in Sweden 42 %, in Estonia 36 % and in Latvia 32 %. The pandemic has estimated to change teleworking permanently in Europe. (Eurofound 2020)

Figure 17. Employers working from home sometimes and usually (%) 2019. (Eurostat 2020)

Ageing workforce

Working after retirement and economic activity has been growing in the Central Baltic countries. The most it has grown in Estonia and Latvia (figure 18). There are two main reasons why people want to work after retirement; many want to work and contribute to society and many pensioners need to work because income is too low. Older people are also active in volunteering, both in the informal sector – self-help and assisting neighbours – as well as formally, through organisations linked to charities, church organisations and local authorities. (Eurofound 2020)

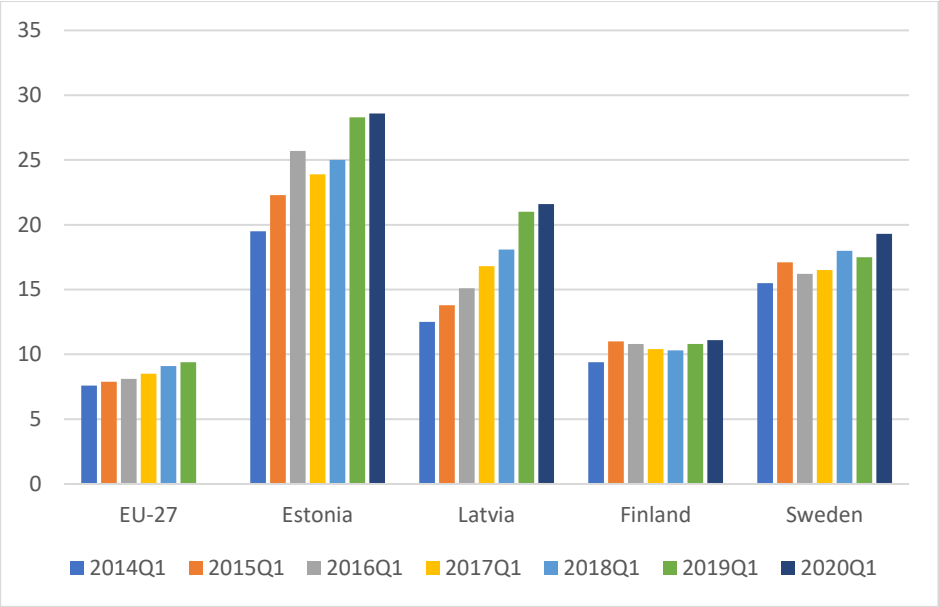


Figure 18. Economic activity rate (aged 65-74), % (Eurostat 2020)

Labour market projections

The number of vacancies notified to the Swedish Public Employment Service (PES) is at a high level, which is an indication that many employers still have significant recruitment needs. At Swedish labour market the knowledge requirements are high and have increased over time. For applicants without any form of upper-secondary education, the chances of finding a job are poor. There is a strong, long-term upward trend in employment in occupations at tertiary education level. In the next few years, there are also expected to be additional jobs in occupations at secondary education level. Competition for certain jobs at this level will continue to be tough, as jobseekers with tertiary-level education are also applying for these jobs. (EURES 2020)

Both in the medium and long term, the demand will mostly increase for employees in highly skilled professions in Latvia. The fastest decline in demand for labour will be in low-skilled occupations. It will affect all sectors. Considering the demographic trends, the supply of adequately skilled workers could significantly decrease in future; hence, the importance of secondary vocational education will continue to increase. On the basis of an existing higher education supply structure, the most significant workforce shortage in the higher education group is expected to come from specialists with education

in engineering, science and ICT (STEM). By 2025, the deficit of adequately skilled workers could exceed 17 thousand, mostly in such areas as energy, computer sciences, construction and civil engineering, as well as in electronics and automation. Furthermore, due to the ageing of society and higher demand for medical services in both the internal and external markets, a noticeable shortage of healthcare and social care professionals will continue. (EURES 2020)

The number of people employed in Estonia is forecasted to rise slightly in the next few years. The highest increase in employment rates is foreseen in the programming sector, with an increase forecast also in research and development-related activities. In connection with the ageing of the population, the proportion of health care and social services is expected to rise. A decrease is expected in the number of people employed in agriculture, the manufacture of wearing apparel, retail trade, the public sector, and, in connection with a decrease in the number of students in education. (EURES 2020)

Currently most employed persons in Finland work in the service sector. The sectors employing the largest number of people are commerce, transport, hotel and catering services, education, health and social services, and other services. Employment in the service sector is expected to continue to increase in the future. (EURES 2020)

COVID-19 effects on employment

The COVID-19 crisis has initially affected service sectors, especially those reliant on social gatherings and physical proximity: live arts/entertainment, hotels and restaurants, sports and leisure, transport and tourism-related activities. The containment regulations have differentiated on the first instance between essential services and sectors and non-essential. Non-essential services have been subject to closure and suspension or restriction of all activity, albeit with part exemptions – for example, in relation to restaurant take-away services. Employment in essential services has continued, although subject to physical distancing protocols and the wearing of personal protective equipment. (Eurofound 2020)

The sectors most affected by COVID-19 closure have been mainly female-dominated. As women tend disproportionately to work in sectors with high levels of social interaction, precisely those affected by physical distancing measures. Employment in sectors subject to closure by decree was mainly female (56 % female versus 46 % across all sectors), young (28 % young people aged 15-29 versus 18 % across all sectors) and low-paid. (Eurofound 2020)

CHALLENGES AND OBSTACLES

- The mismatch of the skills available and jobs needed in labour market.
- How to “translate” the competitive skills and future labour market needs into curricula and teaching processes.
- Gender pay gap decreasing but still in place.
- Increase in foreign labour potentially creates tensions in society.
- Corona crisis impact:
    - increase in unemployment, especially in regard more vulnerable groups of the society (youth, people with special needs, minorities).

    - safety of the jobs and incomes of people employed in hardest hit sectors (tourism, entertainment, creative industries, events,…).
    - increase of “envelope salaries” in sectors hardest hit by crisis.
- Challenges in coordinating labour market services across borders for joint labour market (esp FIN-EST and LAT-EST and FIN-SWE).
- Social care responsibilities hinder the access to labour market.
- Flexible forms of work are underused.

ECONOMIC DEVELOPMENT

The Central Baltic countries economies are of different sizes when comparing countries GDPs. The Swedish economy is the largest, then Finland, Latvia and Estonia respectively (figure 19).

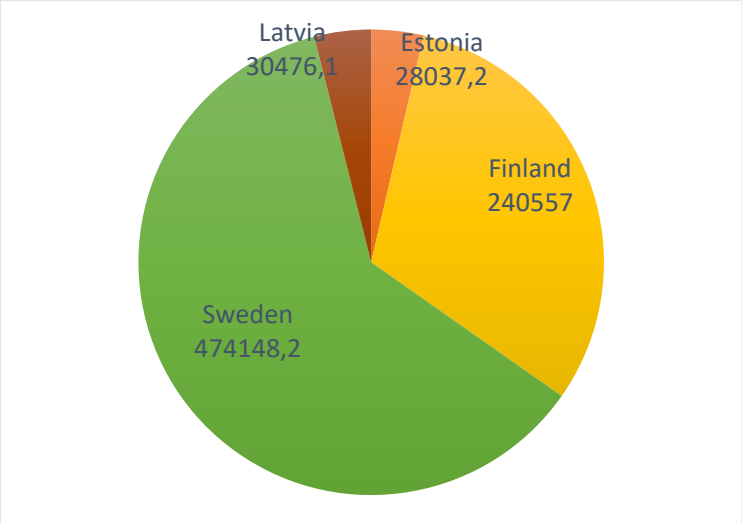


Figure 19. Central Baltic countries GDP (million euro), 2019 (Eurostat 2020)

In OECD economic surveys 2018-2019 all the CB countries' economies were foreseen to grow, public debt was low or reducing, and unemployment was reducing. After the COVID-19 outbreak the picture has changed significantly. According to European Commission's Economic Forecast in 2020 the GDPs of CB countries will reduce by -5,3 % in Sweden, -6,3 % in Finland, -7,0 % in Latvia and -7,7 % in Estonia. The pandemic represents a major shock for the global and EU economies, with very severe socio-economic consequences. Despite the swift and comprehensive policy response at both EU and national level, the EU economy will experience a recession of historic proportions. (European Commission 2020)

The pandemic has severely affected consumer spending, industrial output, investment, trade, capital flows and supply chains. The progressive easing of containment measures should set the stage for recovery. However, the EU economy is not expected to have fully made up for year 2020 losses by the end of 2021. Investment will remain subdued and labour market will not have completely recovered. (European Commission 2020)

Gross domestic product

There are large differences within the Central Baltic region in terms of economic development (measured in GDP). Nordic countries are among the most developed countries in Europe, while regions in Latvia and Estonia have lower GDP levels as seen on figures 20 and 21.

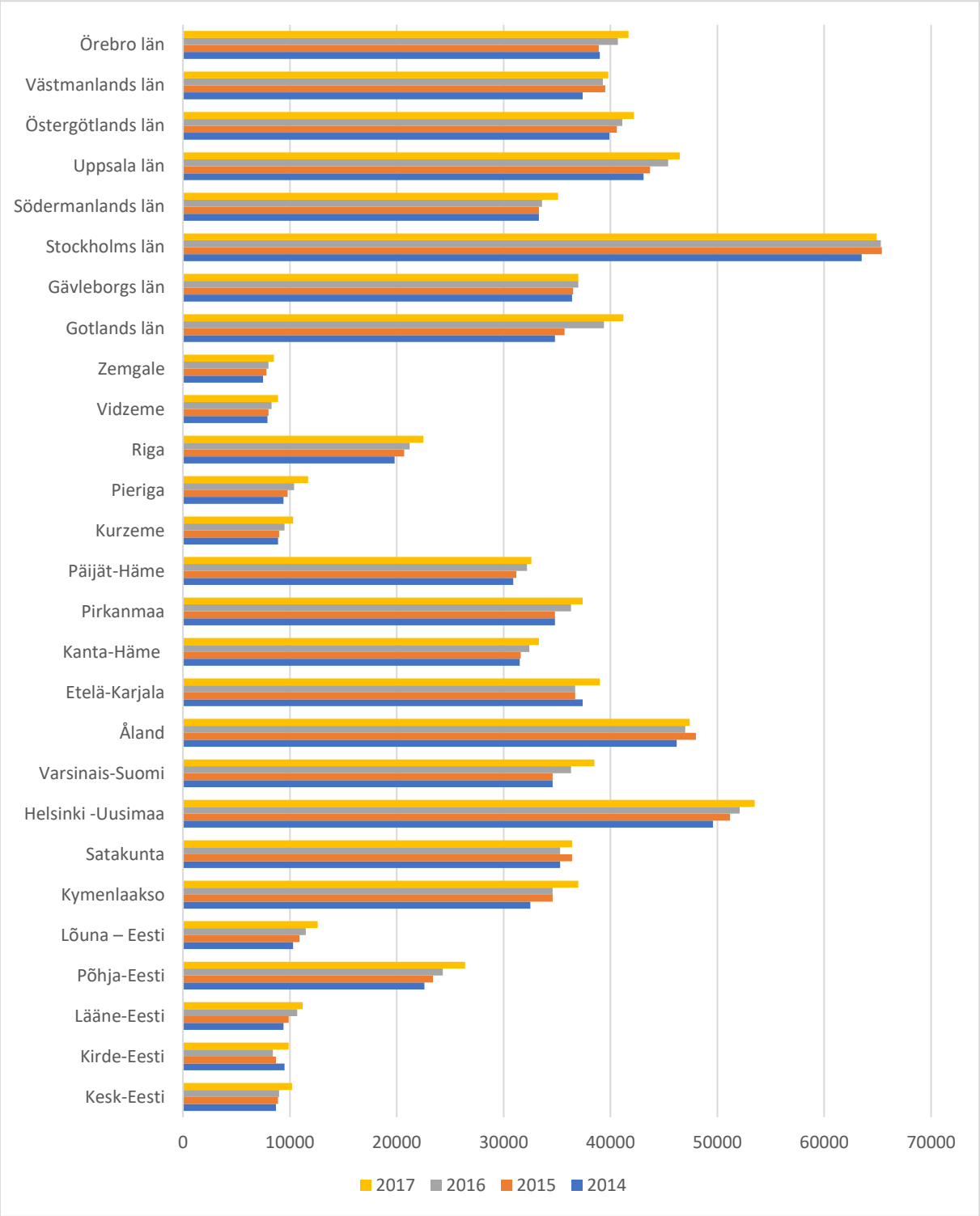


Figure 20. GDP per capita by NUTS 3, 2014-2017 (Eurostat 2020)

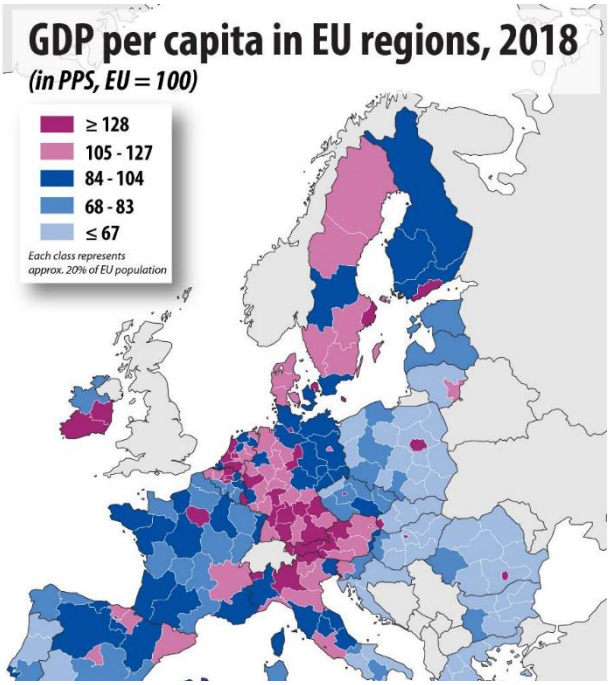


Figure 21. GDP per capita in EU NUTS 2 regions, 2018 (Eurostat 2020)

Capital cities, large cities and metropolitan regions are outstanding economic regions in the Central Baltic area, as well within the whole Europe. In 2018 within the Central Baltic programme area Stockholm has the highest GDP per capita of 50 500 EUR, followed by the Helsinki-Uusimaa region (44 300 EUR per inhabitant) and Åland (37 200 EUR per inhabitant). In 2018 the average for EU 27 countries is 27 620 EUR/inhabitant, whereas the average for all the CB NUTS 2 regions is 33 520 EUR/inhab., that is above the EU average.

Gross value added by sectors

Gross value added for all the Central Baltic countries manufacturing and wholesale and retail trade sectors account for the largest share in gross value added created (see table 4). Real estate activities account for substantial numbers for Estonia, Latvia and Finland. Such sectors as accommodation and food services, arts and entertainment, also mining and quarrying and water supply sectors are among those with lower gross value added figures.

Table 4. Gross Value Added by sectors, %, 2017 (Eurostat 2020)

Gross Value Added by NACE activity	Estonia	Latvia	Finland	Sweden
Manufacturing	22,28 %	16,71 %	21,94 %	18,68 %
Wholesale and retail trade; repair of motor vehicles and motorcycles	15,09 %	20,66 %	10,77 %	15,82 %
Human health and social work activities	4,27 %	4,58 %	10,80 %	11,15 %
Information and communication	9,80 %	7,04 %	7,92 %	11,28 %
Real estate activities	11,79 %	12,06 %	14,76 %	10,26 %
Education	5,40 %	6,35 %	6,31 %	6,00 %
Public administration and defence; compulsory social security	7,58 %	9,16 %	7,16 %	5,74 %
Administrative and support service activities	5,09 %	4,89 %	4,51 %	4,31 %

Financial and insurance activities	3,49 %	3,27 %	3,55 %	5,86 %
Electricity, gas, steam and air conditioning aupply	5,17 %	3,04 %	2,95 %	3,54 %
Agriculture, forestry and fishing	3,24 %	5,26 %	3,50 %	2,15 %
Accommodation and food service activities	1,85 %	2,63 %	1,85 %	1,86 %
Arts, entertainment and recreation	1,75 %	2,70 %	2,05 %	1,53 %
Mining and quarrying	2,21 %	0,60 %	0,80 %	0,83 %
Water supply; sewerage, waste management and remediation activities	0,99 %	1,04 %	1,11 %	0,62 %

International trade

Central Baltic countries are important trade partners for each other. Table 5 summarizes the largest partner countries and their share in total trade (green colour indicates the CB countries). In addition, data shows that Russia is important trade partner for all Central Baltic countries, accounting for substantial shares in countries' imports, as well as being an important target market for countries' exports, especially for Finland, Estonia and Latvia.

Table 5. International trade by partner 2017 (% of total) (The Observatory of Economic Complexity 2020)

	Partner country	**% of total**		**Partner country**	**% of total**
Exports from Estonia, 2017	Finland	12 %	**Exports from Latvia, 2017**	Lithuania	16 %
	Sweden	11 %		Russia	8,1 %
	Russia	10 %		Germay	7,3 %
	Latvia	7,9 %		Estonia	6,9 %
	Lithuania	6,6 %		UK	6,3 %
	Germay	6,0 %		Sweden	5,7 %
	Norway	4,0 %		Netherlands	4,9 %
	United States	4,0 %		Poland	3,8 %
	Netherlands	2,8 %		Denmark	3,7 %
	France	2,8 %		United States	3,5 %
	Denmark	2,6 %		Norway	2,9 %
	Other countries	30,3 %		Other countries	30,9 %
Imports to Estonia, 2017	Germany	10 %	**Imports to Latvia, 2017**	Lithuania	17 %
	Finland	10 %		Germany	10 %
	Russia	9,7 %		Russia	9,8 %
	China	8,5 %		Poland	8,5 %
	Lithuania	5,9 %		Estonia	7,1 %
	Poland	5,6 %		Finland	4,1 %
	Sweden	5,5 %		Netherlands	3,8 %
	Latvia	5,0 %		China	3,5 %
	Netherlands	4,4 %		Sweden	3,1 %
	Italy	2,7 %		Italy	2,9 %
	UK	2,7 %		Canada	2,3 %
	Other countries	30 %		Other countries	26,9 %
	Partner country	**% of total**		**Partner country**	**% of total**
Exports from Finland, 2017	Germany	13 %	**Exports from Sweden, 2017**	Germany	11 %
	Sweden	9,5 %		Denmark	7,2 %
	United States	7,9 %		Norway	7,1 %

	Netherlands	6,6 %		United States	6,8 %
	China	5,6 %		UK	6,2 %
	Russia	5,5 %		Belgium-Luxembourg	5,8 %
	UK	4,6 %		Netherlands	5,4 %
	Belgium-Luxembourg	3,9 %		China	4,9 %
	France	3,5 %		Finland	4,7 %
	Norway	2,5 %		France	4,5 %
	Estonia	2,5 %		Italy	2,9 %
	Other countries	34,9 %		Other countries	33,5 %
Imports to Finland, 2017	Germany	16 %	**Imports to Sweden, 2017**	Germany	19 %
	Russia	13 %		Netherlands	8,4 %
	Sweden	10 %		Denmark	6,8 %
	China	7,7 %		Norway	6,4 %
	Netherlands	5,7 %		Belgium-Luxembourg	5,4 %
	France	3,7 %		UK	5,2 %
	United States	3,1 %		China	4,9 %
	UK	2,9 %		Finland	4,7 %
	Poland	2,8 %		France	4,1 %
	Estonia	2,8 %		Poland	3,9 %
	Italy	2,6 %		Italy	3,2 %
	Other countries	29,7 %		Other countries	28 %

Foreign direct investment

Foreign investment stock refers to the investment made by non-resident natural and legal persons as direct and portfolio investment in the company capital of enterprises and business companies registered in the country. FDI figures show that the Central Baltic region countries already have made substantial investments in one of the other CB countries. FDI figures indicate that:

- In Estonia (in 2017) the largest figures of FDI come from Sweden (28 %), Finland (22 %), Netherlands (8 %), Lithuania (5 %) in such sectors as financial sector (29 %), real estate activities (18 %), manufacturing (13 %) and wholesale and retail trade (13 %). (Invest in Estonia 2020)
- In 2018 the largest investments in Finland were made by Sweden, UK, Norway and USA investing such sectors as health and wellbeing, bioeconomy and cleantech, ICT and business services. (Invest in Finland 2020)
- By the end of 2019, the largest contributors to foreign direct investment in Latvia were Sweden (14,7 %), Estonia (9,8 %), Russia (9,8 %), Netherlands (7,1 %) and Cyprus (7 %). The largest assets are in financial and insurance activities (23 %), real estate activities (16 %), wholesale and retail trade (15 %) and manufacturing (12 %). (Investment and Development Agency of Latvia 2020)
- The largest contributors in Sweden in 2018 were USA, Ireland, Denmark and China. The largest assets are in manufacturing, financial and insurance activities, banks and other financial institutions and chemicals. (Statistics Sweden 2020)

Global companies in the Central Baltic region

The programme area can be characterized as a well-developed region with large number of multinational companies. There are 2 companies registered in the programme area that in 2019 have been ranked among the Fortune Global 500 companies – Volvo from Sweden (#253) and Nokia from Finland (#466). (Fortune Global 500, April 2020) In addition, there are 26 companies from Sweden, 9 companies from Finland listed in Forbes World's Biggest Companies 2000 rating (Forbes Global 2000, April, 2020).

Ease of doing business

The World Bank's *Doing Business* ranking analyse regulatory rules and procedures in a number of key business activities. All of the Central Baltic countries are among the top 20 in 2020 ranking (10. Sweden, 18. Estonia, 19. Latvia and 20. Finland) The ranking is best for rules and regulations affecting trade across borders, which is particularly important for small, export-oriented economies. Looking at the table 6 it is seen that all the other CB countries has improved their ranking during 2014-2020 except Finland. (World Bank Doing Business 2020)

Table 6. Ease of Doing Business rankings 2014-2020. (The World Bank Doing Business 2020)

Country	2020	2019	2018	2017	2016	2015	2014
Estonia	18	16	12	12	16	17	22
Latvia	19	19	19	14	22	23	24
Finland	20	17	13	13	10	9	12
Sweden	10	12	10	9	8	11	14

Competitiveness

The Global Competitiveness report measures performance according to 114 indicators organized into 12 pillars that influence a nation's productivity. The pillars, which cover broad socio-economic elements are; institutions, infrastructure, ICT adoption, macroeconomic stability, health, skills, product market, labour market, the financial system, market size, business dynamism and innovation capability. The 2019 report covered 141 economies, accounting for over 98 % of the world's GDP.

Finland and Sweden are the top countries from the CB area countries. In the 2019 Global Competitiveness report Sweden was in 8th place and Finland in 11th. Estonia was ranked in 31st place and Latvia 41st. All the countries received full marks (100 points) on Macroeconomic stability (the level of inflation and the sustainability of fiscal policy) and the lowest scores almost all the CB countries received on Market Size (the size of the domestic and foreign markets to which a country's firms have access). At the Annex 5 are seen all the scores CB countries received at the 2019 report.

Small and medium sized enterprises

According to the definition provided in the EU recommendation 2003/361, the size of the company is determined according to the figures of total number of employees and turnover *or* total balance sheet figures (see table 7 below).

Table 7. Categories for SME's (EU 2003/361

Company category	Employees	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

In 2015, there were 23.4 million SMEs in the European Union's non-financial business economy, covering 99 % of all enterprises in the EU. The relative importance of SMEs is particularly high in Baltic states. The share of SME's from all enterprises in CB countries are between 99,9 % and 98,4 % (situation in 2017, see table 8). (Eurostat 2020)

Table 8. Number of SMEs in Central Baltic countries in 2017 (Eurostat 2020)

		Number of enterprises	Persons employed
Estonia	From 0 to 9 persons employed	69069	138956
	From10 to 19 persons employed	3457	46090
	From 20 to 49 persons employed	2064	59668
	From 50 to 249 persons employed	1029	96689
	Total	75619	341403
	% of all enterprises	99,8 %	78,9 %
Latvia	From 0 to 9 persons employed	103316	211818
	From10 to 19 persons employed	4944	66894
	From 20 to 49 persons employed	2975	88646
	From 50 to 249 persons employed	1438	140846
	Total	112673	508204
	% of all enterprises	99,8 %	79,3 %
Finland	From 0 to 9 persons employed	210392	354924
	From10 to 19 persons employed	10741	148062
	From 20 to 49 persons employed	3204	188763

	From 50 to 249 persons employed	2946	284094
	Total	227283	975843
	% of all enterprises	98,4 %	65,6 %
Sweden	From 0 to 9 persons employed	673255	792516
	From10 to 19 persons employed	20329	318644
	From 20 to 49 persons employed	12002	414795
	From 50 to 249 persons employed	5527	624050
	Total	711113	2150005
	% of all enterprises	99,9 %	65 %

Tourism

Tourism is an important sector for all the Central Baltic countries, even though the value added figures for accommodation and food service activities are substantially low (see Annex 4). The economic impact of tourism industry varies in Central Baltic countries between 2 % and 4,2 % of total employment contributed by the tourism industry (State of the Tourism Industry in Baltic Sea Region 2019).

The share of tourism exports of service exports in Central Baltic countries are between 30 % and 17 %. The highest share is in Estonia (30 %), then Sweden 20 %, Finland 18 % and Latvia 17 %. Domestic tourism is increasing in Sweden and Estonia, in Finland it has been stable and in Latvia domestic tourism has been decreasing. The employment in tourism industry is increasing in all CB countries. (OECD 2020)

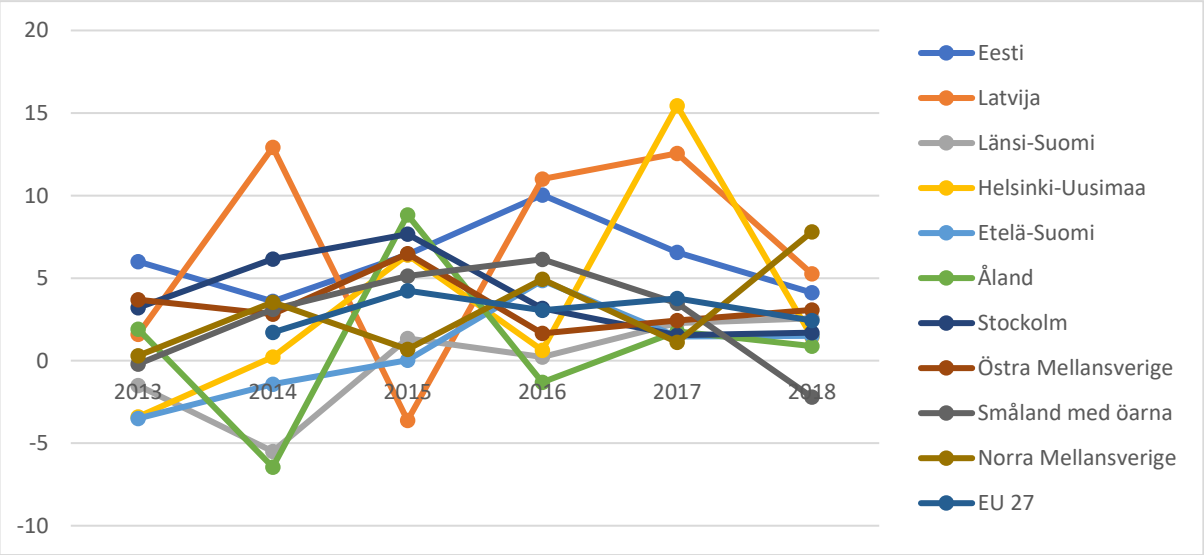


Figure 22. Nights spent, change over previous year, NUTS 2 (Eurostat 2020)

Looking at the figure 22 it is seen that there are big fluctuations at the nights spent changes over previous years specially in Helsinki-Uusimaa, Latvija and Åland. Relatively steady figures are in Östra Mellansverige, Småland med öarna and Länsi-Suomi

Tourism industry in the CB region is subject to strong seasonality effect (figure 23) with the "high season" in the summer and "low season" during the winter time (lowest occupancy levels in January and February), which creates additional challenge for accommodation industry.

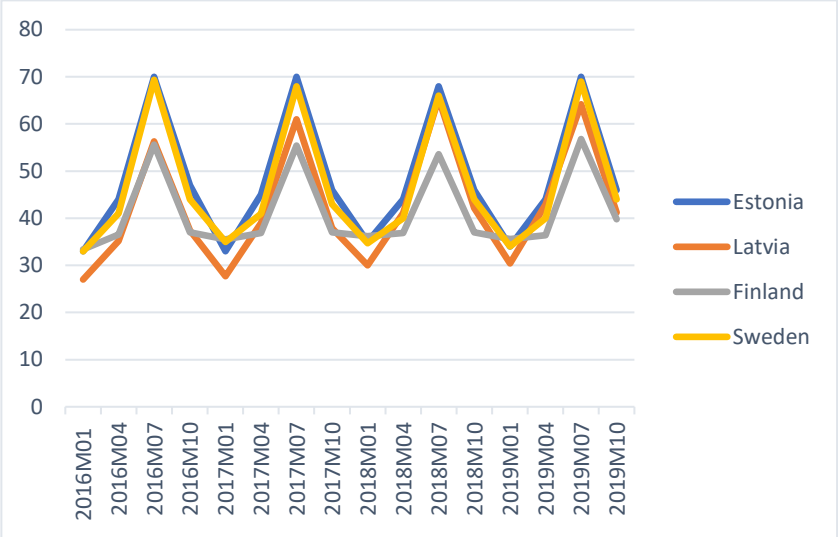


Figure 23. Net occupacy ratre of bedrooms, monthly data, % (Eurostat 2020)

If to compare regions (here NUTS 2) in terms of occupancy rates (average for the whole year 2018), the largest figures are in Helsinki-Uusimaa region (53%), Stockholm län (53%) and Eesti (47%), while the lowest ones are found in Åland (31%) and Norra Mellansverge (38%).

When looking at the countries of origin for overnight visits in CB countries at table 9, it is clear that CB region countries are important tourism destinations for each other and Russian visitors are also important for the region countries.

Table 9. Most overnight visits per origin country 2019 (sources: national statistical bureaus 2020)

	Top 5 visiting countries, most overnight visits 2019
Estonia	1. Russia
	2. Finland
	3. Latvia
	4. Sweden
	5. Germany
Latvia	1. Russia
	2. Germany
	3. Lithuania
	4. Estonia
	5. United Kigdom
Finland	1. Russia
	2. Germany
	3. United Kingdom
	4. Sweden
	5. China
Sweden	1. Norway
	2. Germany
	3. Denmark
	4. United States of America
	5. United Kingdom
Åland	1. Finland
	2. Sweden
	3. Norway
	4. Germany
	5. Estonia

Covid-19 impact on tourism

Travel and tourism sector are among the most affected sectors suffering from the Covid-19 outbreak with the airplanes on the ground, hotels closed, and travel restrictions put in place virtually all countries around the world. International tourist arrivals (overnight visitors) saw a decrease of 56% in the first five months of 2020 over the same period of last year. International arrivals declined 98% in the month of May, reflecting the travel restrictions in nearly all destinations worldwide. According to UNWTO (World Tourism Organization) report in July tourism was showing signs of a gradual and cautious change in trend during the summer peak months, as reflected in the gradual lifting of travel restrictions in several countries around the world, particularly in Europe. Domestic tourism is expected to resume faster and experts mentioned changes being witnessed in consumer behaviour such as trips closer to home or proximity travel, bookings closer to the departure dates of the trip, or preference to travel by car. (World Tourism Organiazation 2020)

When looking at the Central Baltic programme areas the change from June 2019 to June 2020 is very drastic (see Annex 7 for charts at the end of this analysis). All the capital regions suffer from over -70 % change in nights spent in hotels and tourism accommodation establishments. Domestic travel has not suffered as much but still the drop has been around -50 % to -30 %.

Central Baltic technology start-up scene

Even though there is little statistical data on new technology start-up companies being established in the region, there is a lot of information and different websites about startups available in internet.

According to a survey made by EU Start-up Monitor the European start-ups are creating a large number of jobs. On average, companies currently have 12.8 employees from different countries and are planning to hire another 7.5 people within the next twelve months. Many start-ups are so-called born global, which means that they operate across borders and in some cases open an office in more than one country when starting operations. (EU Start-up Monitor 2018)

Start-up Heatmap Europe is mapping startup ecosystems based on how founders feel and what data tells about them. At the table 10 is seen the ranking of CB capital cities. The trust score is a measurement of popularity of a start-up location based on the recommendations of founders.

Table 10. Ranking of CB capital cities (Start-up Heatmap Europe 2019)

City	Trust rank	% of founders	Funds raised (bn €):
Tallinn	9th	7,06 %	0,08 bn €
Riga	54th	0,81 %	0,02 bn €
Helsinki	35th	1,80 %	0,35 bn €
Stockholm	10th	6,07 %	1,5 bn %

According to Start-up Heatmap Europe geography is a decisive factor for start-up success. But while location is mostly seen as the choice of one particular spot, they believe the reality of transnational mobility and networks of founders has overcome these boundaries at least partially. Therefore, they are proposing a new way of looking at networks of locations bound together by founder inter-

connectivity. They use the image of highway systems, to depict the fluidity among start-up ecosystems.

A «highway» is defined as a strong connection measured by the recognition of a place by founders from another location. It is defined as mutual connections, where founders of both hubs recognize the startup scene in the other place and as one way connections, where it is seen a strong recognition into one direction. Founder recognition is based on >6,000 answers of founders since 2016 to the question of where they would like to start their company in Europe. This is an important proxy not only for the attractiveness but also for the connection among start-up hubs as founders tend to choose locations, they feel close and familiar with.

Helsinki and Tallinn are geographically close to each other but these two hubs are not as strong as might be suspected: Helsinki-based founders can envision to start-up in Tallinn at a rate of 9%, while only around 4% of their Tallinn-based counterparts list Helsinki as a favourite start-up hub. Together, they attract about 8.7% of all founders in Europe. The most popular they are in their home region (27% marketshare) as well as in the CEE(Central and Eastern Europe) (13%).

When looking at the Nordics, it is seen that they are strongly orientated towards hubs outside the region. The data is showing the strong one-way connections originating from the Nordics, but none coming back. Besides the Tallinn–Helsinki connection, only the Riga–Tallinn link fulfils this criteria with 13% of Riga-based founders voting for Tallinn. This connection is however not mutual. All other Nordic Hubs orientate strongly towards London and Berlin with an average of 15% of their founders opting for these hubs. (Start-up Heatmap Europe 2020)

One of the finances-related indicators for new establishments is data on venture capital investments. Venture capital investment (VCI) is a subset of a private equity raised for investment in companies not quoted on stock market and developing new products and technologies. It is used to fund an early-stage (seed and start-up) or expansion of venture (later stage venture) (description by Eurostat).

As seen in figure 24 the largest VC investment are in Sweden and Finland. The share of investments is fluctuating in every country between 2013-2018. The biggest differences are in Estonia and steadiest are in Finland.

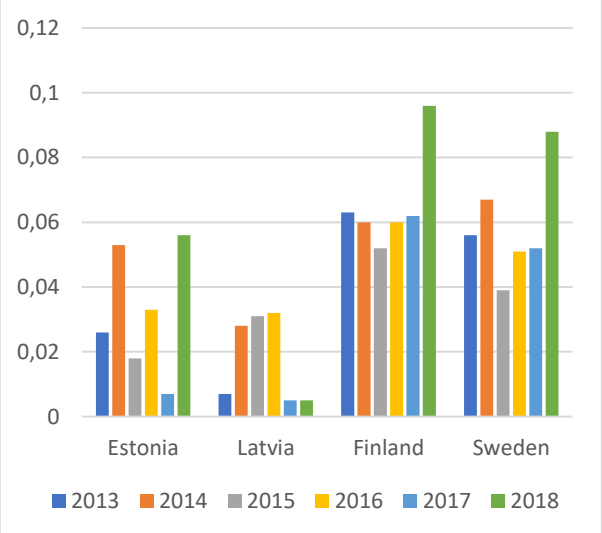


Figure 24. Total VC investment, % of GDP (OECD 2020)

Innovation

The objective of smart growth as advocated by the Europe 2020 Strategy and EU Cohesion Policy is strongly linked to innovation. Often this is equalled with the number of patents or R&D activities or expenditure. The Europe 2020 strategy sets the target increasing combined public and private investment in R&D to 3 % of GDP by 2020. As it is seen in the figure 25, Sweden is the only country that has reached the 3 % target, Finland was in the target in 2013 but the expenditure rate has decreased since. Finland and Sweden are both above the EU 27 average and Estonia and Latvia are below the target and EU 27 average. In all countries the expenditure on R&D has been steady between 2013 and 2018.

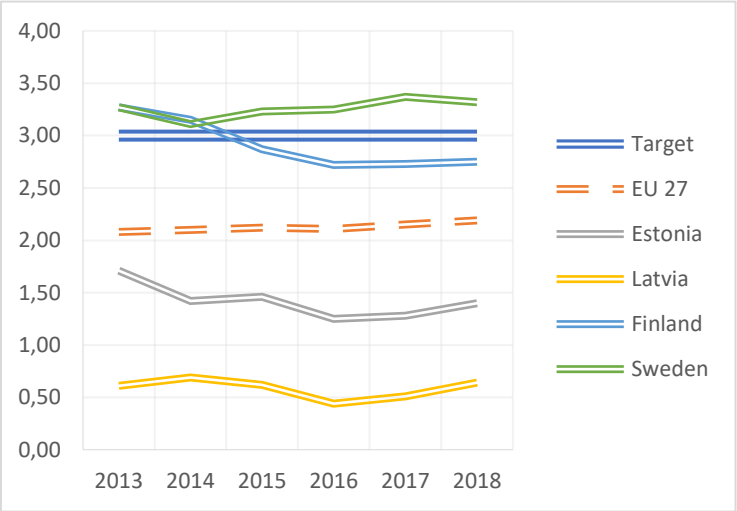


Figure 25. GDP expenditure on R&D (Eurostat 2020)

As measured by the European Innovation Scoreboard the Central Baltic countries have been rated differently in terms of innovation capacity and activities. The metropolitan areas of Sweden and Finland have gained the highest rating, being classified as the *Innovation Leaders* of the region. In comparison, Estonia has been identified as *Strong Innovator* and Latvia – *Moderate Innovator.* Sweden was the 2019 EU innovation leader, followed by Finland, Denmark and the Netherlands. In table 11 below it is seen the scores of Central Baltic countries. (European Innovation Scoreboard 2020)

Table 11. Innovation index 2019 by European Innovation Scoreboard (European Innovation Scoreboard 2020)

	Estonia	Latvia	Finland	Sweden
SUMMARY INNOVATION INDEX	95,3	60,3	134,0	135,8
Human resources	109,7	63,0	157,0	174,9
Attractive research system	94,4	41,0	135,4	166,2
Innovation-friendly environment	87,9	90,9	182,3	172,3
Finance and support	88,5	97,4	113,6	109,3
Firm investments	90,6	46,4	129,8	124,3
Innovators	107,6	39,7	168,2	115,4
Linkages	121,2	48,0	152,0	147,3
Intellectual assests	127,8	53,5	151,8	156,2
Employment impacts	66,4	94,4	80,2	134,5
Sales impacts	65,6	53,9	85,4	88,0

CHALLENGES AND OBSTACLES

- Central Baltic countries economies are dominated by SME-s and microenterprises:
    - difficult to participate in global competition.
    - rather low level of R&D investments.
    - cooperation between companies is weak.
- Weak regional and local supply chains:
    - Supply chains where regional leaders/champions are in place are globally overextended and regionally underrepresented.
    - Regional supply chains of critical importance need strengthening.
- Emerging but still weak regional clusters of different economic sectors and their unused potential for:
    - Accessing the new markets.
    - Strengthening regional supply chains.
    - Product development.
- Emerging but still fragile regional technology start-ups ecosystem.
    - Capacities to provide services are weak.
    - Awareness and culture/mindset need strengthening.
- New business start-ups creation is challenging as in many sectors “regional champions” as creators of opportunities are missing, and new companies encounter immediately global competition.
- Seasonality of tourism activities and revenues having impact on jobs and revenues.
- To large extent the tourism sector has low value added and it is challenging to increase it.
- Refocusing from mass tourism to sustainable tourism and maintaining profitability.
- How to make, create and sustain new safe and secure solutions for travellers after corona.
- Low awareness of Central Baltic region’s tourism attractions and services within region and outside;
    - Insufficient tourism packaging, marketing, among CB partner countries (to generate internal tourism).
    - Lack of common Central Baltic tourism branding (identity) to outside tourists as a basis for better selling of culture, conference, nature, green, wellness and health tourism should be pursued.
- Underexploited potential for new business development is sectors such as ICT, “low-carbon” solutions, “silver economy”, “green” and “blue” economy.
- Balancing the goals for economic development and sustainable use of resources:
    - Exploiting the opportunities within circular economy is challenging as regional critical weight is missing for profitable business models and solutions.
- Smart specialization strategies in Central Baltic regions lack proper resources for implementation and coordination.

COMMUNICATION INFRASTRUCTURE

IT and ICT

ICTs affect people's everyday lives in many ways, both at work and at home, for example, when communicating or buying goods or services online. ICTs have become widely available to the general public, both in terms of accessibility as well as cost. A boundary was crossed in 2007, when a majority (55 %) of households in the EU-28 had internet access. By 2018, the share of EU-28 households with internet access had risen to 89 %. (Eurostat 2020)

In figure 26 is seen the percentage of households who have internet access at home in Europe in year 2009 and year 2019. From Central Baltic countries all countries except Latvia is at same level or above EU 27 average. The figure illustrates that in 10 years the accessibility of internet access has grown significantly almost in every country in EU.

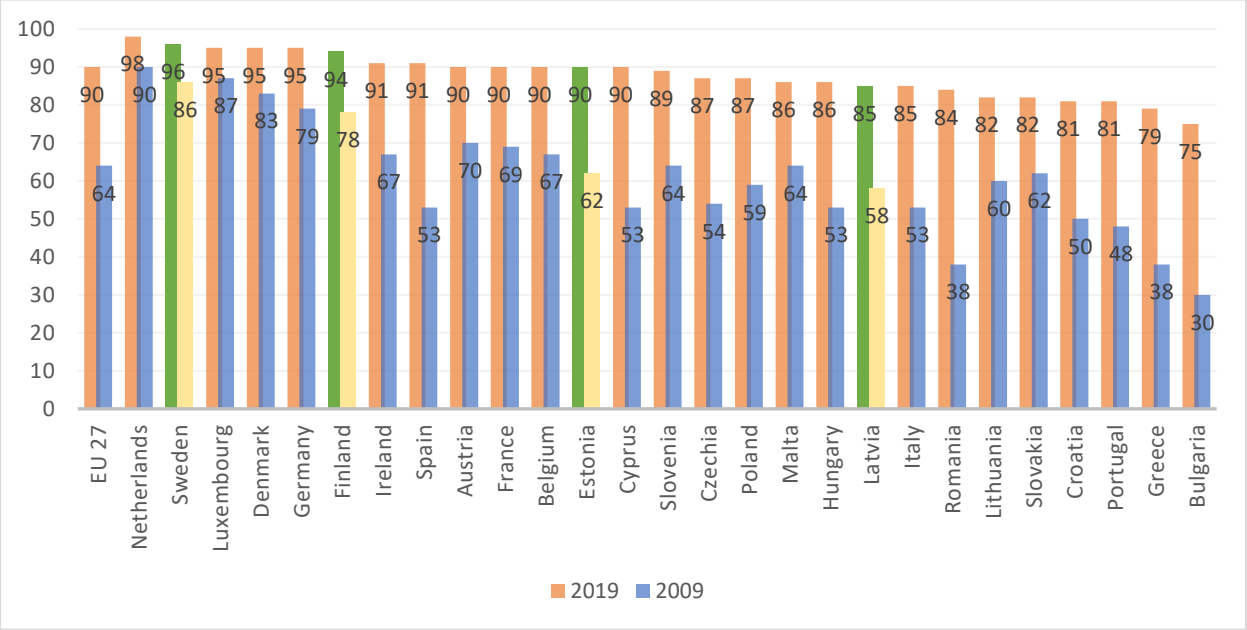


Figure 26. Percentage of households who have internet access at home (Eurostat 2020)

Figure 27 looks at the use of the internet while on the move, in other words when away from home or work, for example, using the internet on a portable computer or handheld device via a mobile or wireless connection. The figure compares 2013 data, when 39 % of individuals aged 16 to 74 within the EU-27 used a mobile device to connect to the internet, with 2018 data, by which time this share had risen to 67 %. The most common mobile devices for internet connections were mobile or smart phones, laptops, and tablet computers. Also in Central Baltic countries the use of mobile internet access has increased a great deal in all countries.

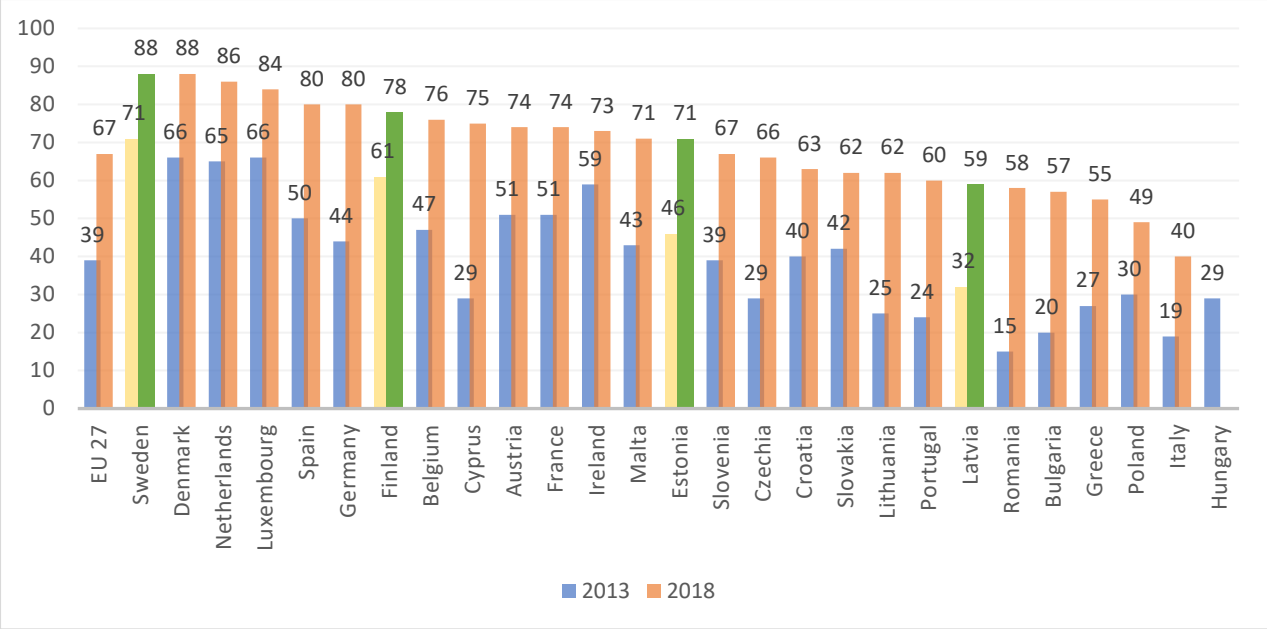


Figure 27. Percentage of individuals using mobile internet access with portable device (Eurostat 2020)

Finland and Sweden scored the highest ratings in The Digital Economy and Society Index (DESI) (figure 28) in 2019. They are in among the global leaders in digitalization. In the index Estonia was in place 7 and Latvia in place 17 among EU 28. DESI summarises relevant indicators on Europe's digital performance and tracks the evolution of EU member states in digital competitiveness.

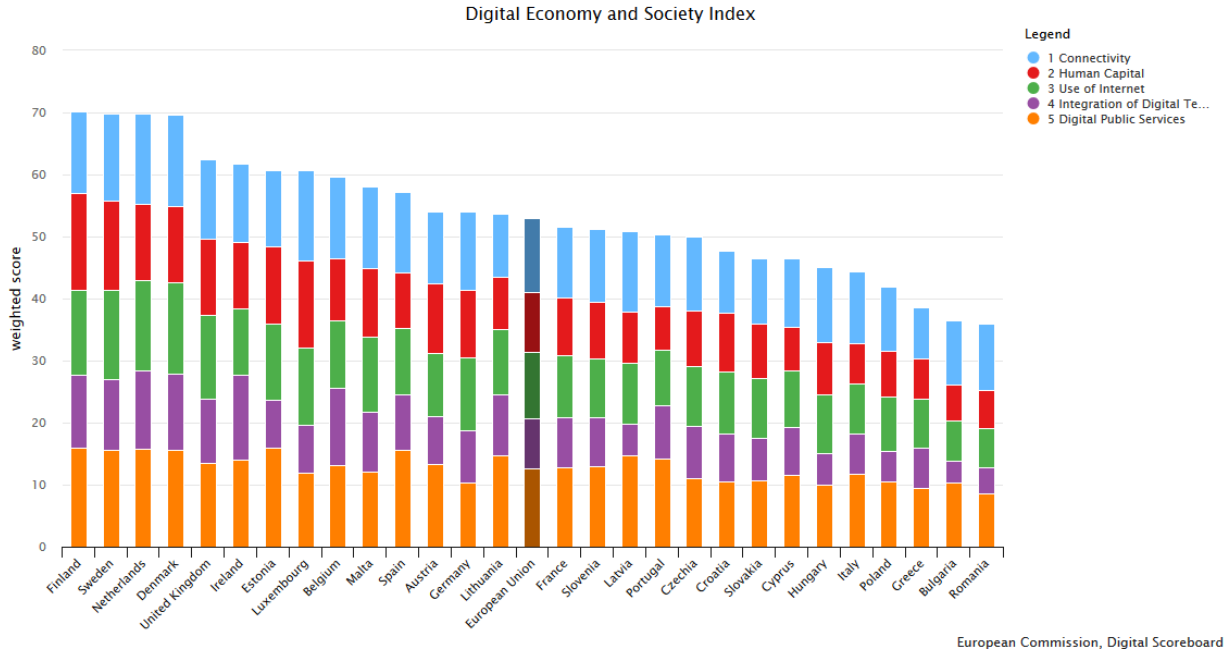


Figure 28. The Digital Economy and Society Index 2019 (European Commission 2020)

CHALLENGES AND OBSTACLES

- Underexploited physical digital infrastructure.
- Digital gap (in regard access and capacity to use digital resources) in societies still exists.
- Public sector's digital solutions and services lag behind the needs of societies and the need to achieve more cost efficiency.
- The use of existing public services and solutions should be made more widespread.
- Digitalization of industry is lagging behind and is especially challenging among SME-s.

TRANSPORT AND ACCESSIBILITY

The Central Baltic regions differ in terms of accessibility. While capital regions of all the countries are well connected with regional and global centres, accessibility is still a challenge for remote areas. For example, islands are only connected by sea and air transport modes. In figures 29 and 30 it is seen that capital regions in Finland and Sweden have the most maritime and flight passengers.

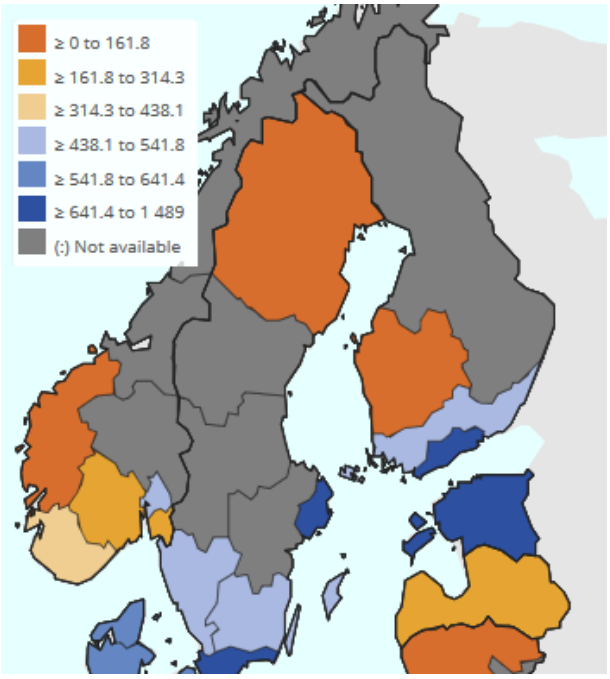


Figure 29. Maritime transport of passangers (1 000 passangers, embarked and disembarked) 2017 (Eurostat 2020)

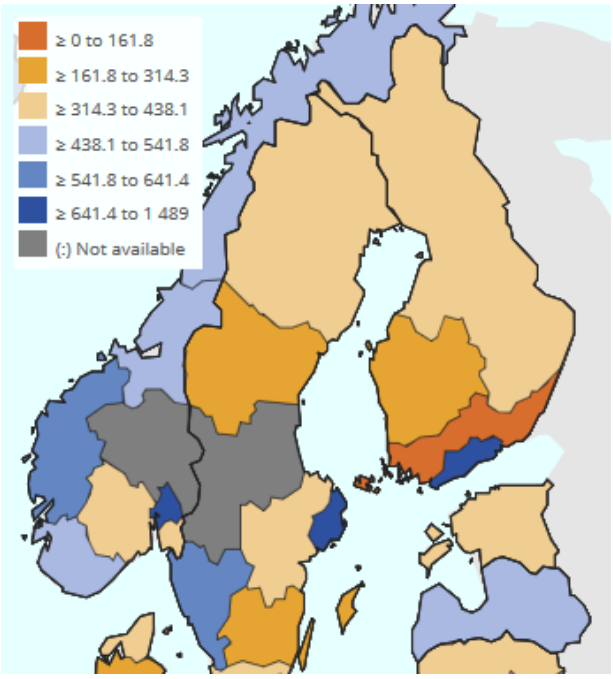


Figure 30. Air transport of passengers (1 000 passengers, arrivals and departures) 2017 (Eurostat 2020)

As it seen at the figure 31, High motorway densities are in densely populated areas of Western Europe. In contrast, sparsely populated areas have low motorway densities. Overall, the Central Baltic countries account for considerably lower motorway density figures than the EU average.

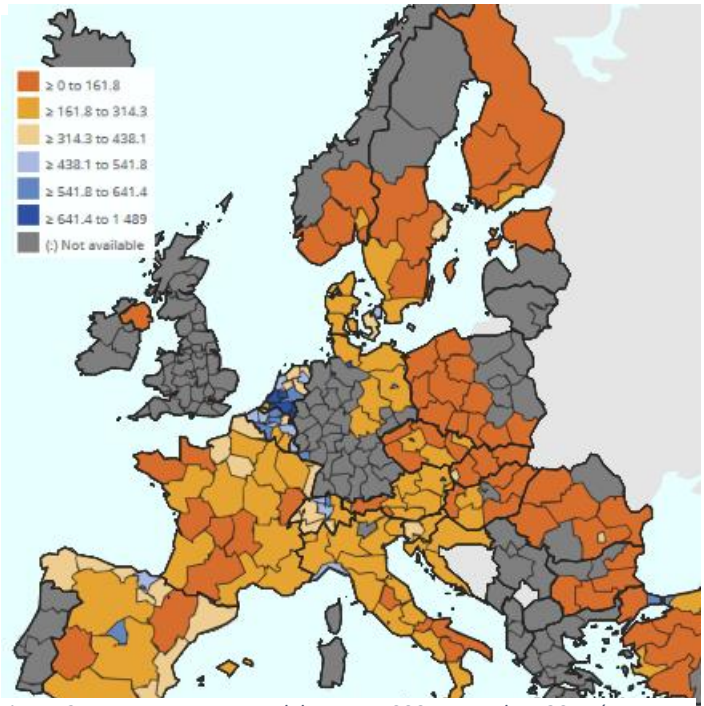


Figure 31. Motorway, network km per 1 000 square km, 2017 (Eurostat 2020)

Maritime

Maritime transport is historically and currently an important unifying factor for the programme area. It plays an important role in both cargo and passenger movements between the Central Baltic countries (the most frequent passenger connections run between Finland and Estonia). The Baltic Sea is also an important route for cargo transport to and from Russia.

Among the largest ports of the region (with largest cargo turnover) is Freeport of Riga, Ventspils Freeport, Port of Tallinn, Port of Haminakotka, Port of Helsinki, Ports of Stockholm as it is seen at the table 12. The most intensive passenger turnover (over 12 M passengers in 2019) is in Stockholm ports.

Table 12. Largest ports in the Central Baltic region (compiled by author using data from ports' websites)

Name of the port	Cargo turnover, 2019 (1000 tonnes)	Cargo turnover, 2018 (1000 tonnes)	Change, %	Passengers 2019	Passengers 2018	Change %
Freeport Riga	32 762,2	36 431,9	-10,1	868 700	796 040	9,1 %
Ventspils Freeport	20 457	20 327	0,68 %	233 537	222 562	4,9 %
Port of Tallinn (Old City Harbour, Old City Marina, Muuga Harbour, Paljassaare Harbour, Paldiski South Harbour, Saaremaa Harbour)	19 931	20 608	-3,3 %	11,4 million	11,3 million	0,9 %
Ports of Stockholm (Port of Stockholm, Port Kapelskär, Port of Nynäshamn)	9,3 M tonnes	9,6 M tonnes	-3,2 %	12,1 million	12,1 million	0 %
Port HaminaKotka	18 092	16 167	11,9 %	7499	2500	199 %
Port of Helsinki	14,4 M tonnes	14,7 M tonnes	-2 %	11 614 000	11 558 000	0,5 %
Port of Rauma	5,830 M tonnes	5,835 M tonnes	-0,1 %	-	-	-
Port of Liepāja	7,334 M tonnes	7, 537 M tonnes	-2 %	39 987	46 713	-14,4 %

Port of Oxelsösund	N/A	N/A	-	N/A	N/A	-
Port of Turku	2,19 M tonnes	2,24 M tonnes	-1,84 %	3 133 143	3 140 306	-0,23 %
Port of Pori	N/A	N/A	-	-	-	-
Port of Gävle	N/A (around 6 M tonnes every year)		-	-	-	-
Port of Visby	N/A	N/A	-	N/A	N/A	-
Marienhamn Port	N/A	N/A	-	2 404 700	2 494 099	-3,6 %
Eckerö (Berghamn) Port	N/A	N/A	-	963 260	972 398	-0,9 %
Långnäs port	N/A	N/A	-	5 332	13474	-60 %

In addition, there are many small ports in the coasts of the CB countries, as well as in the islands and archipelago area. Small ports (small-scale cargo ports, yachting ports, fisheries' ports) are important for local economies. They foster growth in economic activity, employ local people and enhance development of other business activities (e.g. small shipbuilding and repair, storage, transport and communications). In turn, they are also important for tourism development, especially for services of yachting boats, small fishing vessels.

Overall, as monitored by Helcom, the Baltic Sea is one of the most intensively shipped seas in the world (15% of all cargo of the world). And according to projections, the intensity is expected to increase in the future. At figure 32 it is seen the shipping density at the Baltic Sea in year 2016.

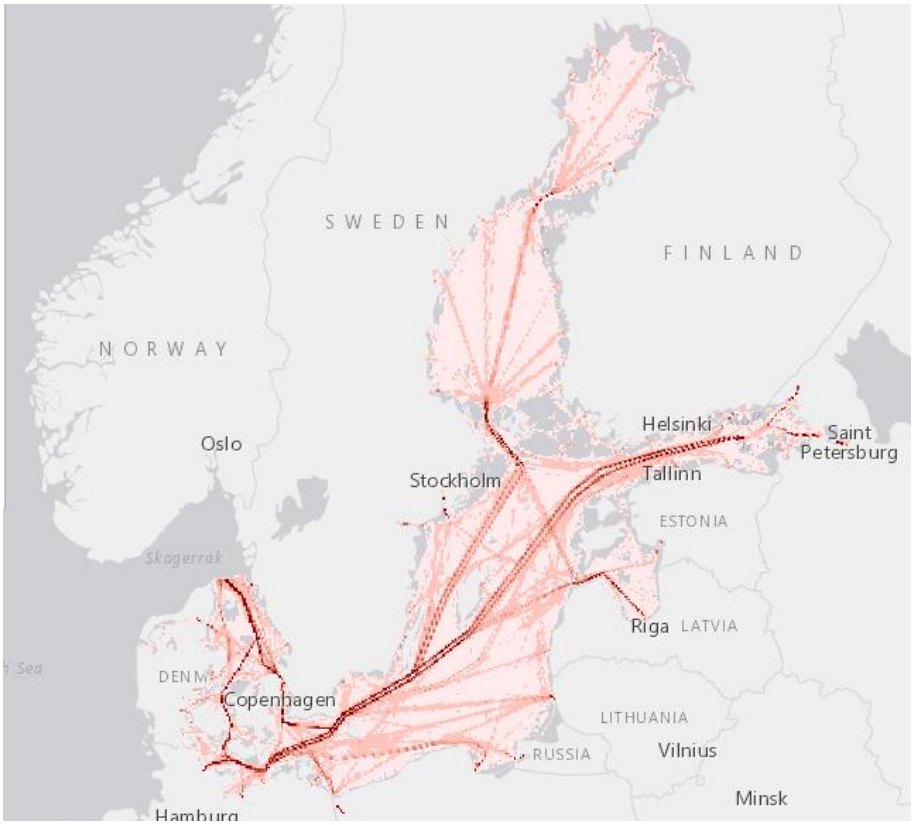


Figure 32. Shipping density 2016, all vessels (HELCOM 2020)

CHALLENGES AND OBSTACLES

- The lowering of the CO2 emissions of multimodal, complex transport systems.
- Strong COVID-19 impact to air and sea connections - decreased number of connections and travel opportunities.
- Access to and within islands and archipelagos needs to be improved in environment friendly way.
- The use of mobility solutions with significantly lower CO2 emissions is low and economically challenging in many parts of Central Baltic region because of low population density and large, diverse geography.
- Existing North-South transport corridors are distant from some regions (e.g., eastern parts of Estonia and Finland) and leave their potential underexploited.
- Developing and maintaining the East-West transport corridors is difficult because of administratively controlled transit flows and increased capacities of Russia's ports.
- Lack of cross-border infrastructure planning.

ENVIRONMENT AND RESOURCE EFFICIENCY

Major environmental problems of the Baltic Sea

Governed by special hydrographical and climatic conditions, the Baltic Sea is one of the planet's largest bodies of brackish water. Due to the special hydrographical and climatic conditions, the Baltic Sea is vulnerable. Over the past 100 years, the Baltic Sea has been degraded quite dramatically. Human pressures such as overfishing, pollution and now, increasingly, the effects of climate change are altering the ecological balance and depleting renewable resources beyond safe biological limits. (WWF Baltic 2020)

Eutrophication

The Baltic Sea still suffers from eutrophication. Excessive input of nutrients to the marine environment enhances the growth of phytoplankton, leading to reduced light conditions in the water, oxygen depletion at the seafloor (as excessive primary producers are degraded), and a cascade of other ecosystem changes. At least 97 percent of the region was assessed as eutrophied in 2011–2016 according to the integrated status assessment. Nutrient inputs from land have decreased as a result of regionally reduced nutrient loading, but the effect of these measures has not yet been detected by the integrated status assessment. Although signs of improvement are seen in some areas, effects of past and current nutrient inputs still predominate the overall status. In figure 33 is seen the status assessment of eutrophication in the Baltic Sea. (HELCOM 2018)

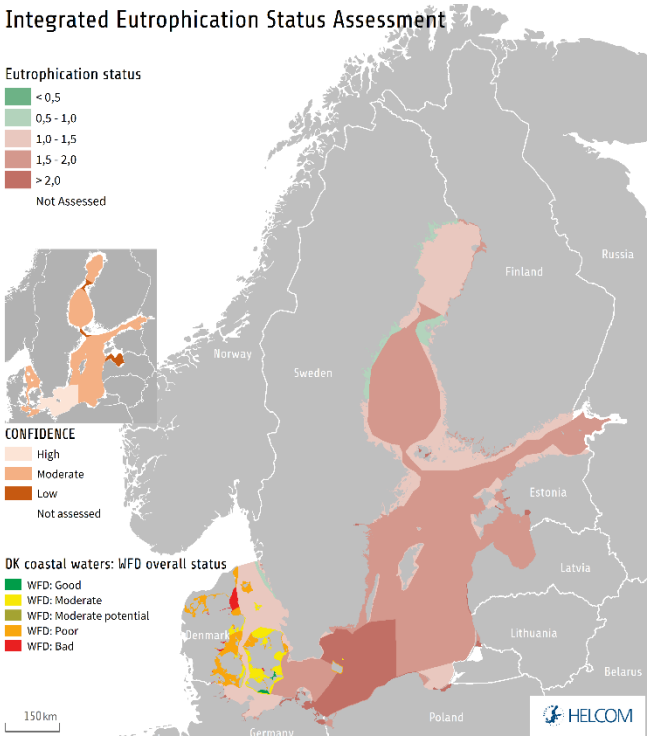


Figure 33. Eutrophication status assessment by Helcom (HELCOM 2018)

Marine litter

Marine litter is a clearly visible problem along the Baltic Sea coastline. It also appears under the surface and in many different size classes. The smallest microlitter is invisible to the human eye but reaches the marine food web when animals ingest it. Larger marine litter deteriorates habitat quality and can cause direct harm to animals when they swallow it or become entangled. Around 70 % of the marine litter in the Baltic Sea is plastic. Plastic materials are of special concern due to their risks to the environment and slow degradation. As it is seen in the figure 34, plastic is the most common beach litter item in the Baltic Sea region. (HELCOM 2018)

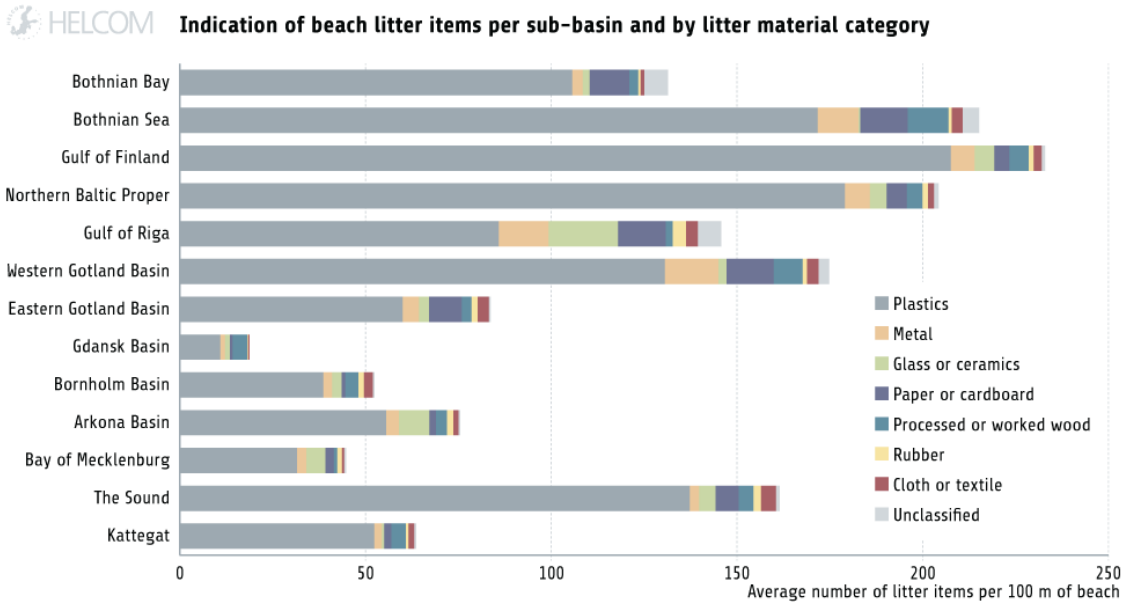


Figure 34. Beach litter items per sub-basin. (HELCOM 2018)

Hazardous substances

Man-made chemicals and heavy metals enter the Baltic Sea via numerous sources, including wastewater treatment plants, leaching from household materials, leaching from waste deposits, and atmospheric deposition from industrial plant emissions, amongst others. Once in the Baltic Sea, they can cause various types of damage to the ecosystem. Some are highly visible in the form of oil-spills, others however can remain unnoticed or are only apparent when detrimental impacts on the ecosystem or biota are observed. Many contaminants degrade slowly, and their impacts can magnify as they accumulate within the aquatic food web. The contamination status is elevated compared to natural conditions in all parts of the Baltic Sea. In figure 35 is seen the status assessment of contamination in the Baltic Sea. (HELCOM 2018)

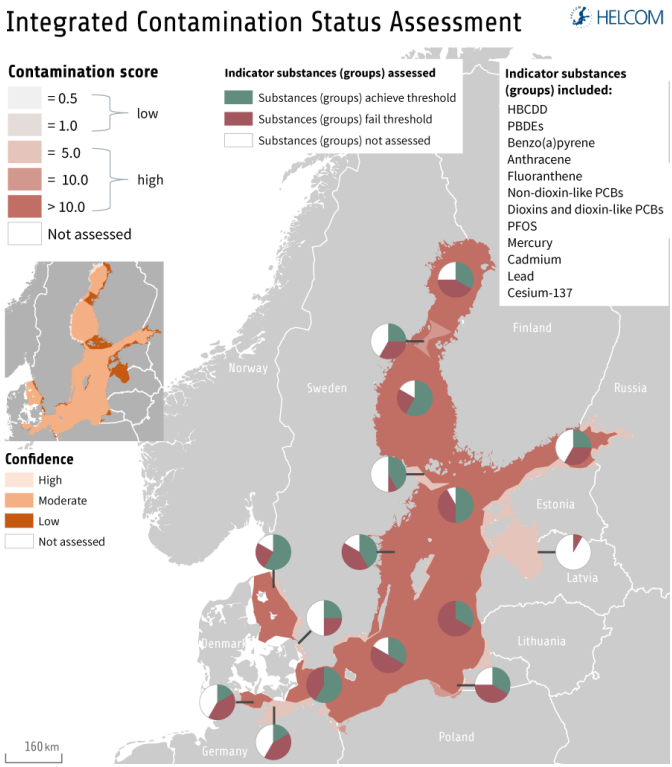


Figure 35. Contamination status assessment by HELCOM (HELCOM 2018)

Biodiversity

The number of species in the Baltic Sea is low compared to most other seas due to the low salinity. However, due to its unique salinity gradient and high variability in habitat types, the Baltic Sea contains a greater biodiversity and variety of plant and animal life than might be expected under such

conditions. Achieving a good status of biodiversity is a HELCOM priority, strengthened by, among other things, the revised Helsinki Convention in 1992 and the Baltic Sea Action Plan. However, many species are still under threat. It is anticipated that biodiversity will show signs of improvement in the coming years, as the effects of recently implemented measures start to be seen, but continued efforts to improve the environmental status of biodiversity are of key importance. (HELCOM 2018)

Climate change

In the Baltic Sea region, warming is likely to exceed its global average, particularly in winter and in the northern parts of the area. The warming will be accompanied by a general increase in winter precipitation, but in summer, precipitation may either increase or decrease, with a larger chance of drying in the southern than in the northern parts of the region. Despite the increase in winter precipitation, the amount of snow is generally expected to decrease, as a smaller fraction of the precipitation falls as snow and midwinter snowmelt episodes become more common. Changes in windiness are very uncertain, although most projections suggest a slight increase in average wind speed over the Baltic Sea. Climatic extremes are also projected to change, but some of the changes will differ from the corresponding change in mean climate. For example, the lowest winter temperatures are expected to warm even more than the winter mean temperature, and short-term summer precipitation extremes are likely to become more severe, even in the areas where the mean summer precipitation does not increase. (Räisänen 2017)

The projected atmospheric changes will be accompanied by an increase in Baltic Sea water temperature, reduced ice cover, and, according to most studies, reduced salinity due to increased precipitation and river runoff. The seasonal cycle of runoff will be modified by changes in precipitation and earlier snowmelt. Global-scale sea level rise also will affect the Baltic Sea, but will be counteracted by glacial isostatic adjustment. According to most projections, in the northern parts of the Baltic Sea, the latter will still dominate, leading to a continued, although decelerated, decrease in relative sea level. The changes in the physical environment and climate will have a number of environmental impacts on, for example, atmospheric chemistry, freshwater and marine biogeochemistry, ecosystems, and coastal erosion. However, future environmental change in the region will be affected by several interrelated factors. Climate change is only one of them, and in many cases its effects may be exceeded by other anthropogenic changes. (Räisänen 2017)

Circular economy

The following chapter is based on a publication of EUSBSR: No time to waste – Unlocking the circular potential of Baltic Sea region, published in 2019.

Circularity meets many challenges in BSR countries:

- Environmental (climate change, extractive mining, air pollution, soil degradation, waste treatment);
- Economic (unsustainable production and consumption patterns, premature obsolescence);
- Social (migration pressure, rampant consumerism in the North Europe, ecological unconcern in the postcommunist countries, lost jobs in linear economy).

Different starting point between its countries are an obstacle for developing a common strategy for the macroregion. While some of them struggle mainly with coal mining and air pollution, other should focus rather on diminishing energy use. All of them, however, need to accelerate introduction of circular economy policies.

Only Finland and Germany adopted a circular economy strategy. Poland, Estonia and Sweden are in progress of formulating one. On the other hand, in almost every BSR country there is circular economy education/promotion provided or planned, with the exception of Lithuania and Latvia.

Various economic trends support the transition towards circularity:

- Growing importance of services in the economy reduces the demand for natural resources;
- Digitalisation facilitates products' leasing, sharing and renting, extends products' lifespan, and helps to increase waste recyclability;
- Resource price increases enhance need to improve production efficiency and incentivise for materials reuse.

The impact of social trends, however, is ambiguous. While an aging European society increases the demand for services instead of products, immigration mounts pressure on consumption growth and hampers a change in attitudes toward higher ecological awareness.

CEA index

In the EUSBSR report the Circular Economy Advancement (CEA) index was calculated by using 24 variables divided into four categories (Retake, Reuse, Deconsume, Recycle) that represent the four areas of circular economy activities that was investigated in the report. The figures that the Central Baltic countries received are seen at the table 13.

Table 13. CEA index of Central Baltic countries (EUSBSR 2019)

	Retake	Reuse	Deconsume	Recycle
Estonia	89 %	40 %	47 %	67 %
Latvia	67 %	43 %	58 %	50 %
Finland	52 %	36 %	57 %	71 %
Sweden	70 %	43 %	73 %	80 %

The "retake" index is measured by considering domestic material consumption in kilogrammes per USD 1 of GDP (negative), the share of circular material in total material use in a given economy (positive), post-tax energy subsidies as percentage of GDP (negative) and the share of spending on environmental protection in total national expenditure (positive). Based on these, the index ranges from 0 to 100 percent.

The "reuse" index was calculated based on nine variables. Three of them describe the circular efficiency of the whole economy (non-energy material productivity, production-based CO_2 productivity and share of renewable energy in gross final energy consumption), while six measure the size of the circular economy and entrepreneurial activity in that area (value added, investment and employment shares relating to the circular economy sector, circular economy activities undertaken by companies, declared investment in resource efficiency and the share of patents relating to recycling

and secondary material usage). The better a country does in each area, the higher the index. The best performer in all nine categories at the same time scores 100 percent.

To measure the "deconsume" index, a variety of social indicators was used that are a yardstick for green attitudes (willingness to pay for environmental protection, awareness of the negative externalities of human activity) and actions (joining NGOs that protect the environment, volunteering for environmental conservation projects), as well as macroeconomic variables that measure the demand-based carbon footprint of an economy and energy use by consumers.

The "recycle" index was constructed using the data on six factors: urban wastewater treatment, three indicators of air pollution (GHG, CO_2 and PM 2.5 emissions), the share of total waste that is recycled or composted, and municipal waste per capita. All of these, except the data on wastewater treatment and recycling, have a negative effect on the index; a higher indicator means a lower index value.

Energy consumption

One of the priorities of the Energy Union strategy is to increase energy efficiency in an attempt to reduce energy consumption by 32.5 % by 2030. Energy intensity is a measure of an economy's energy efficiency and shows how much energy is needed in order to produce a unit of gross domestic product (GDP). As it is seen in figure 36. the most intensive economy in 2018 in programme area is Estonia and then Finland, Sweden and Latvia respectively. The energy intensity has decreased between 2012 and 2018 in all countries (Eurostat 2020)

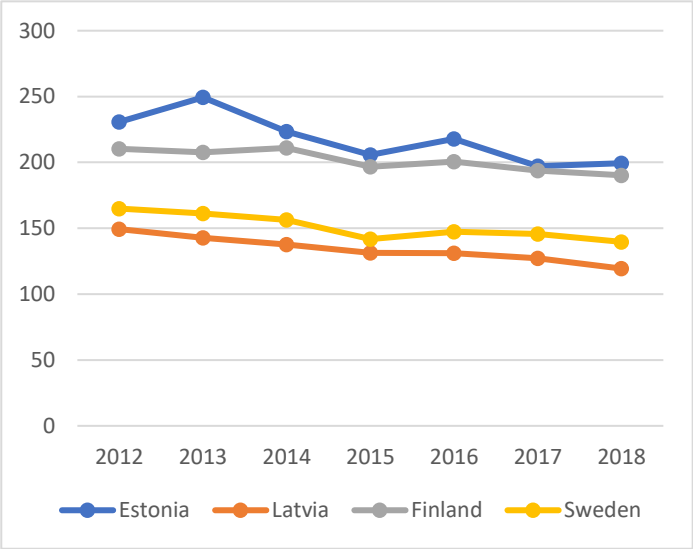


Figure 36. Energy intensity 2012-2018 (Eurostat 2020)

Looking at the figure 37. that describes the final energy consumption in 10 years it can be said that energy consumption has been stable in programme countries. Final energy consumption covers the energy consumption of end-users, such as industry, transport, households, services and agriculture. It excludes consumption of the energy sector itself and losses occurring during transformation and distribution of energy (e.g. power plants, district heating plants, oil refineries, coke ovens, blast furnaces). (Eurostat 2020)

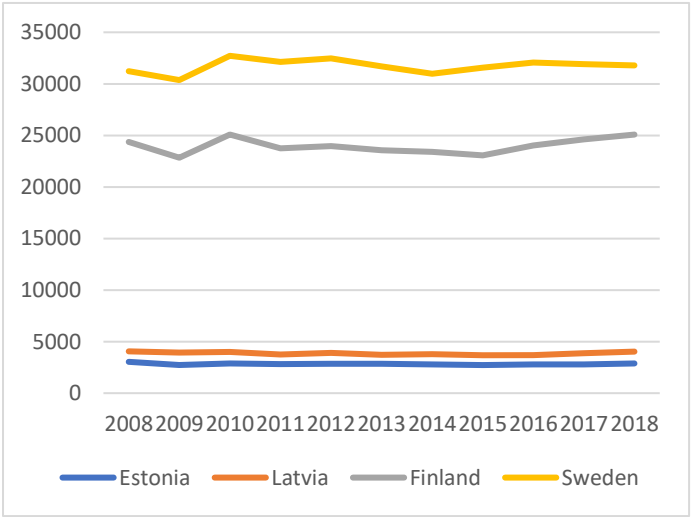


Figure 37. Final energy consumption in programme countries 2008-2018 (Eurostat 2020)

Renewable energy

The EU's target is to reach 20 % of its energy from renewable sources by 2020 and at least 32 % by 2030. All the programme countries have reached this goal. At the figure 38. are seen the shares of renewable energy of gross final energy consumption in programme countries compared to EU 27.

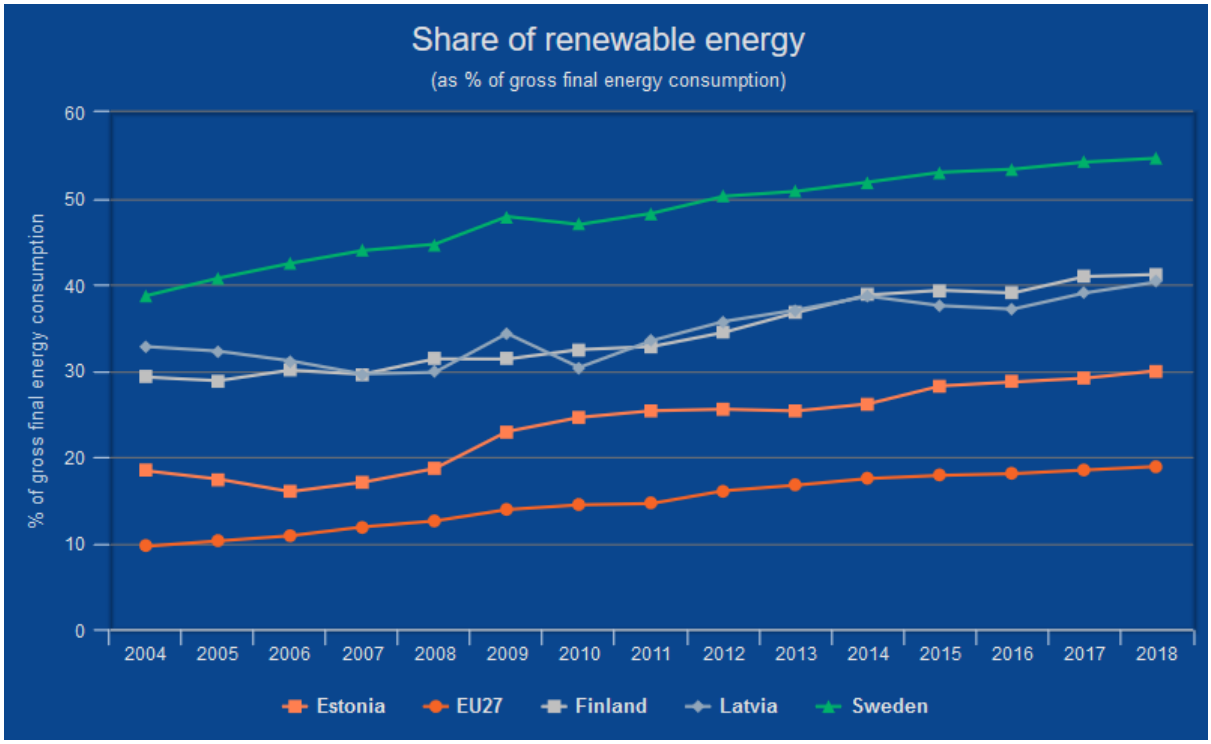


Figure 38. Share of renewable energy, % of gross final energy consumption (Eurostat 2020)

CHALLENGES AND OBSTACLES

- High levels of solid waste produced by industry, service sectors and households combined with insufficient levels of reuse.
- CO2 intensity of main economic sectors (esp industry, transport, energy production) causing large carbon footprint.
- Existing levels and new inflows of the nutrients (N, P) to the Baltic Sea.
- Existing levels new inflows of the hazardous substances and toxins to the Baltic Sea.
- Existing levels and new inflows of marine litter, plastics (Esp. microplastics).
- Because of high levels of shipping on Baltic sea and port activities, the risk of oil spills at sea and on sea coast.
- Decreasing levels of biodiversity in different parts of the Central Baltic region.
- Balancing the conserving and developing aspects of natural resources in creating sustainable tourist attractions used to improve the quality of living and visiting environment and also for healthy lifestyle.

- Awareness rising for inhabitants on more sustainable lifestyles and consumption (addressing all environmental fields noted above) – reuse, improvement versus consumption.
- Sustainability of urban areas, including challenges of integrated planning of urban environments, including how to involve relevant actors (cross-sectoral cooperation).
- CO2 capture, multilevel approach is missing: landscaping, buildings, awareness, technologies;
- Insufficient reuse of textile waste.
- Large amounts of food waste.

SOCIAL INCLUSION

Risk of poverty

The Europe 2020 strategy promotes social inclusion, in particular through the reduction of poverty. This indicator corresponds to the sum of persons who are: at risk of poverty or severely materially deprived or living in households with very low work intensity. Persons are only counted once even if they are present in several sub-indicators. At risk-of-poverty are persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income (after social transfers). Material deprivation covers indicators relating to economic strain and durables. Severely materially deprived persons have living conditions severely constrained by a lack of resources, they experience at least 4 out of 9 following deprivations items: cannot afford *i) to pay rent or utility bills, ii) keep home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) a week holiday away from home, vi) a car, vii) a washing machine, viii) a colour TV, or ix) a telephone.* People living in households with very low work intensity are those aged 0-59 living in households where the adults (aged 18-59) work 20% or less of their total work potential during the past year. (Eurostat 2020)

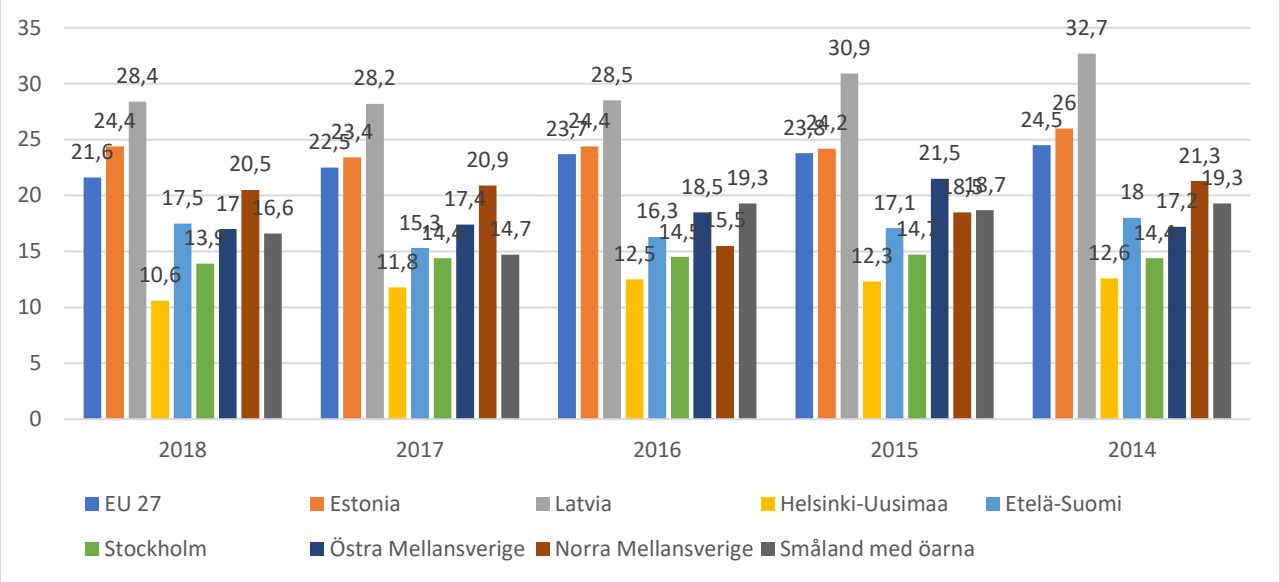


Figure 39. People at risk of poverty or social exclusion by NUTS 2 regions, % (Eurostat 2020)

At figure 39 it is seen that all other areas are below EU 27 average except Estonia and Latvia. The risk of poverty rate has decreased from year 2014 to 2018 in all areas. Länsi-Suomi and Åland figures were not available.

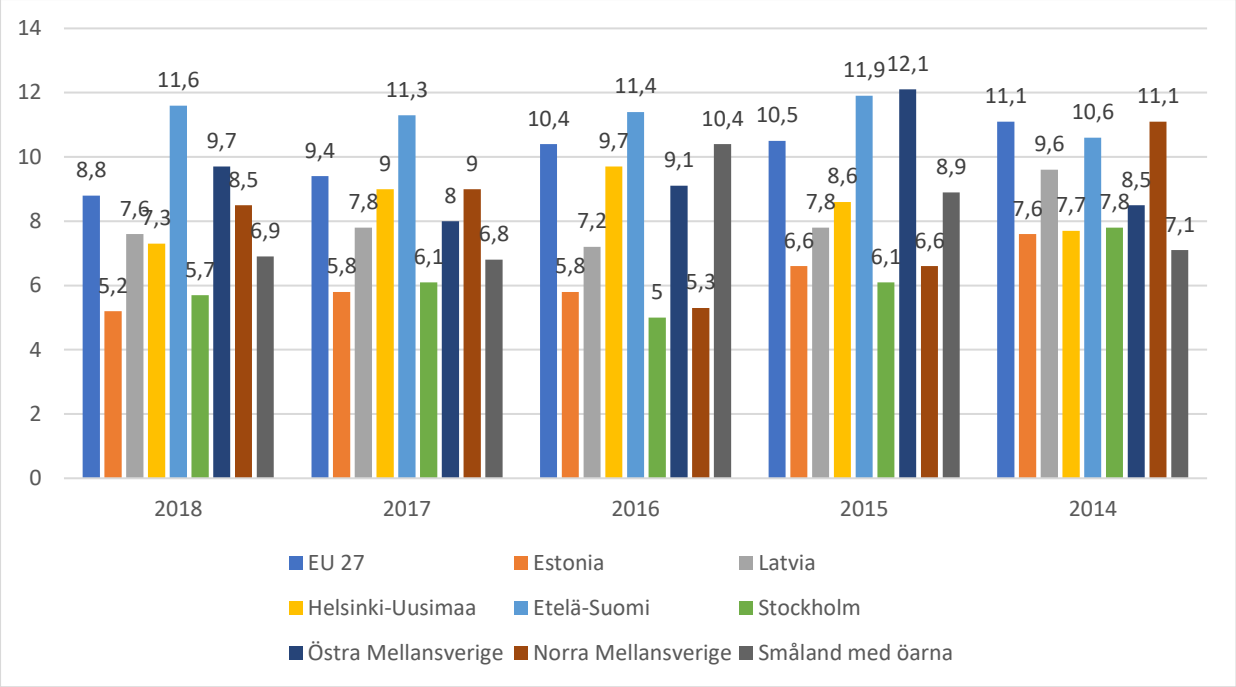


Figure 40. Share of people living in households with very low work intensity (aged 0-59), % (Eurostat 2020)

The indicator for people living in households with very low work intensity are people aged 0-59 living in households where the adults work less than 20% of their total work potential during the past year. As it is seen at the figure 40 the largest share of people living in households with very low work intensity are in Etelä-Suomi and Östra Mellansverige, all the other regions are below EU 27 average. The lowest shares are in Estonia and Stockholm.

Health

Each year the United Nations Development Programme publishes the report of Human Development across the globe, providing a comprehensive analysis including composite statistics on life expectancy, education, social and income inequality, and economic sustainability. In 2018 all the Central Baltic countries have been identified as countries with "Very high development index" (Sweden as the 8th most developed country in the world, followed by Finland (12th), Estonia (30th) and Latvia (39th). (United Nations Human development index 2018) In 2009 Human Development report Sweden was in 7th place and Finland 12th, Estonia 40th and Latvia 48th. Estonia improved their status from High Human Development rank to Very High Human Development in 2010 and Latvia in 2011.

At this stage only data for health index will be described and compared. Based on UNDP data, Sweden and Finland have the highest figures in public expenditure on health 10,9 % and 9,5 % respectively (as share of GDP) (only Switzerland (12,2 %) and Germany (11,1 %) are ahead of Sweden). Another indicator that Human Development Index accounts for is under-five mortality rates (indicating probability of dying between birth and an age of 5, expressed per 1000 live births). Finland, Estonia and Sweden have one of the lowest mortality ratios in Europe and Latvia has a bit bigger ratio. Looking at the healthy life expectancy rate (healthy life expectancy for very high human development countries is about 68 years) Sweden, Finland and Estonia has the highest rates, while Latvia has a bit lower rate. All the rates are seen at the table 14.

Table 14. Summary of the main health status indicators per country (Human Development Index 2019)

Indicator	Estonia	Latvia	Finland	Sweden
Expenditure on health, public (% of GDP)	6,7	6,2	9,5	10,9
Under-five mortality (per 1000 births)	2,7	4,2	2,3	2,8
Healthy life expectancy at birth (years)	67	64,6	69,8	70,9

CHALLENGES AND OBSTACLES

- Increasing the healthy life expectancy of the ageing population.
- Increased risk of poverty (especially more vulnerable groups of the society) during economic crisis.
    - Corona crisis impact – need for more services to more people.
- Potential of women's skills and talent pool to engage in new business development underexploited.
- Elderly people as a source of new business development are underexploited resource.
- Access to labour market (work opportunities) by certain groups of society (minorities, young people, people with disabilities, people with reduced work ability, people with special needs, single parents etc) is challenging.

Central Baltic programme area as functional area

The Central Baltic programme area has well integrated economies characterized by strong trading links (exports and imports) and cross-border investments (ownership of companies). Please refer to chapter on Economic development: International trade, Foreign direct investment for more information.

The five capital city regions (Helsinki, Stockholm, Tallinn, Marienhamn and Riga) are well connected. The regions can be reached by flights, ferries, bus, and train connections to Helsinki, Stockholm, Riga and Tallinn. All the capital cities are at the coast of the Baltic Sea and the sea is a strong unifying factor of the whole programme area. Please refer to chapter Transport and accessibility for more information.

The Swedish kingdom and Hanseatic League dominated the regions from the 11th century to 17th century. The Great Northern War at the 18th century affected all the Central Baltic countries at that time. These have been important in building strong historical and cultural links around the Central Baltic area. Languages are different but hey have similarities and loanwords from each other.

The Central Baltic programme countries are important tourism destinations for each other. Neighbouring countries are often popular and easily accessible resorts. This is elaborated in more detail in chapter Tourism (table: TOP 5 visiting countries).

Some integrated higher educational systems do exist, such as Stockholm School of Economics in Stockholm and Riga, Estonian Business School in Tallinn and Helsinki.

There are some important Nordic-Baltic joint institutions and networks at the CB area such as the Nordic Investment Bank. There is also a long tradition of cooperation between islands in the coastal regions in the Archipelago Cooperation under the Nordic Council of Ministers.

The Central Baltic programme as such has already a long history of cooperation. The programme has been existing in its current form from 2007 and cooperation links in the region are well established.

The two specific parts of the Central Baltic programme area are integrated even stronger and those are recognised as sub-functional areas:

- South-Finland – Estonia has a long history of cooperation in trade, labour market, relations of people and institutions and there is a high volume of mobility between countries, strong cultural links and linguistic closeness.

- Archipelago and islands areas within Central Baltic region have similar geographic, cultural and natural characteristics as well as similar challenges in accessibility and sparsely populated areas.

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Annex 1. Area, population

(Eurostat, 2020)

Country	Region	Total area (incl. inland waters) (km2)	Total population (2019)	Population change since 2014	Population density (inhab./km2)
Estonia	Kesk-Eesti	9 068	12 292	-1,96 %	13.6
	Kirde-Eesti	4 019	136 240	-9,72 %	41.9
	Lääne-Eesti	11 193	148 940	0,97 %	13.4
	Põhja-Eesti	4 338	599 478	4,57 %	135.6
	Lõuna – Eesti	16 718	317 240	-1,52 %	20.4
Finland	Kymenlaakso	5 634	173 388	-4,30 %	34.3
	Satakunta	8 268	218 624	-2,71 %	28.3
	Helsinki -Uusimaa	9 568	1671 024	5,12 %	181.0
	Varsinais-Suomi	10 910	478 582	1,61 %	44.7
	Åland (autonomy)	1 581	29 789	3,77 %	18.9
	Etelä-Karjala	6 872	128 756	-2,72 %	24.4
	Kanta-Häme	5 708	171 364	-2,40 %	33.3
	Pirkanmaa	14 613	515 095	2,90 %	40.6
	Päijät-Häme	6 255	200 629	-0,89 %	39.3
Latvia	Kurzeme	13 603	240 113	-7,46 %	18.3
	Pieriga	10 140	370 589	0,96 %	36.9
	Riga	13 603	632 614	-1,70 %	2479.4
	Vidzeme	15 252	186 095	-8,50 %	12.6
	Zemgale	10 740	230 331	-6,31 %	22.1
Sweden	Gotlands län	3 166	59 249	3,52 %	18.6
	Gävleborgs län	19 629	286 547	2,99 %	15.7
	Stockholms län	7 153	2344 124	7,72 %	350.8
	Södermanlands län	7 026	294 695	5,81 %	47.7
	Uppsala län	8 608	376 354	8,20 %	44.6
	Östergötlands län	12 229	461 583	5,14 %	43.1
	Västmanlands län	5 658	273 929	5,43 %	52.6
	Örebro län	9 633	302 252	5,58 %	34.9
Total		**251 185**	**10 859 916**	**3%**	

Annex 2. Population indicators

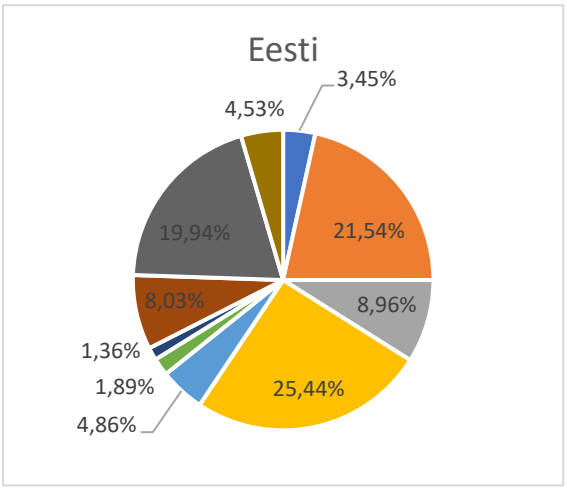
(Eurostat, 2020)

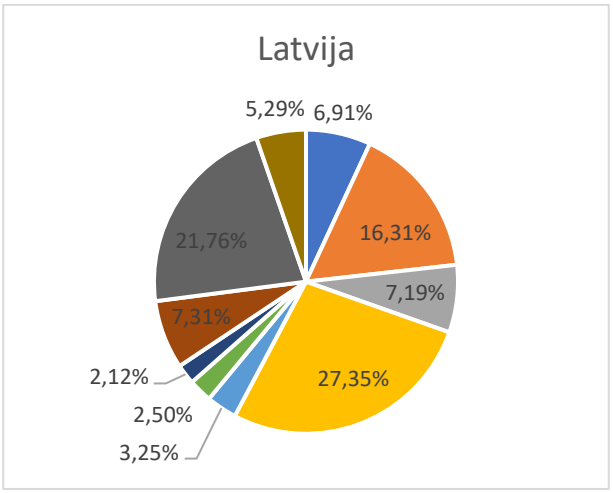
		Net migration		Natural change of population		Crude rate of net migration (per 1000 people)		Crude rate of natural change (per 1000 people)	
Country	**Region**	**2014**	**2018**	**2014**	**2018**	**2014**	**2018**	**2014**	**2018**
Estonia	Kesk-Eesti	-602	-403	-498	-426	-4,8	-3,3	-4,0	-3,5
	Kirde-Eesti	-851	-873	-1035	-1153	-5,7	-6,4	-7,0	-8,4
	Lääne-Eesti	-89	374	-701	-454	-0,6	2,5	-4,8	-3,0
	Põhja-Eesti	2370	7330	1128	1167	4,1	12,3	2,0	2,0
	Lõuna – Eesti	-1443	643	-827	-518	-4,5	2,0	-2,6	-1,6
Finland	Kymenlaakso	-343	-894	-644	-1229	-1,9	-5,1	-3,6	-7,0
	Satakunta	8	-636	-581	-1138	0,0	-2,9	-2,6	-5,2
	Helsinki -Uusimaa	11527	11494	6388	3906	7,2	6,9	4,0	2,3
	Varsinais-Suomi	1744	1920	101	-1015	3,7	4,0	0,2	-2,1
	Åland (autonomy)	219	292	31	8	7,6	9,9	1,1	0,3
	Etelä-Karjala	54	-304	-542	-805	0,4	-2,4	-4,1	-6,2
	Kanta-Häme	18	-698	-149	-658	0,1	-4,1	-0,8	-3,8
	Pirkanmaa	2533	3348	683	-334	5,0	6,5	1,4	-0,7
	Päijät-Häme	53	193	-468	-792	0,3	1,0	-2,3	-3,9
Latvia	Kurzeme	-2301	-1372	-1011	-1547	-9,0	-5,7	-3,9	-6,4
	Pieriga	594	3588	-23	-265	1,6	9,7	-0,1	-0,7
	Riga	-889	-2934	-1472	-2423	-1,4	-4,6	-2,3	-3,8
	Vidzeme	-1876	-1258	-1012	-1141	-9,4	-6,7	-5,0	-6,1
	Zemgale	-1944	-1061	-781	-1367	-8,0	-4,6	-3,2	-5,9
Sweden	Gotlands län	119	755	-25	-101	2,1	12,8	-0,4	-1,7
	Gävleborgs län	2403	886	-382	24	8,6	3,1	-1,4	0,1
	Stockholms län	21136	23461	13866	12520	9,7	10,1	6,4	5,4
	Södermanlands län	2715	3135	382	219	9,7	10,7	1,4	0,7
	Uppsala län	2175	6020	1286	1363	6,3	16,2	3,7	3,7
	Östergötlands län	3308	3414	949	673	7,5	7,4	2,2	1,5
	Västmanlands län	2256	2649	393	185	8,7	9,7	1,5	0,7
	Örebro län	2250	2851	505	494	7,8	9,5	1,8	1,6

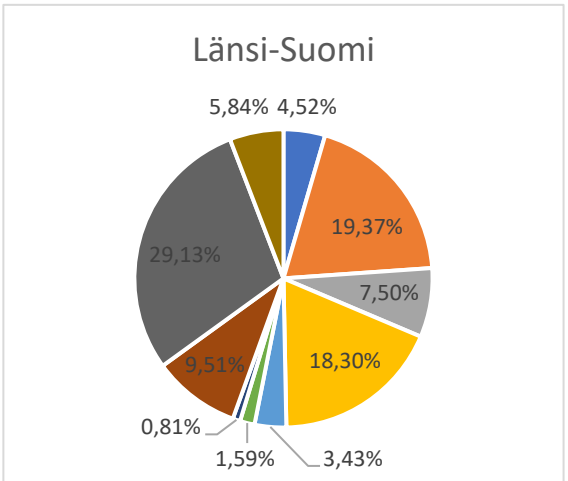
Annex 3. Employment by industry 2017

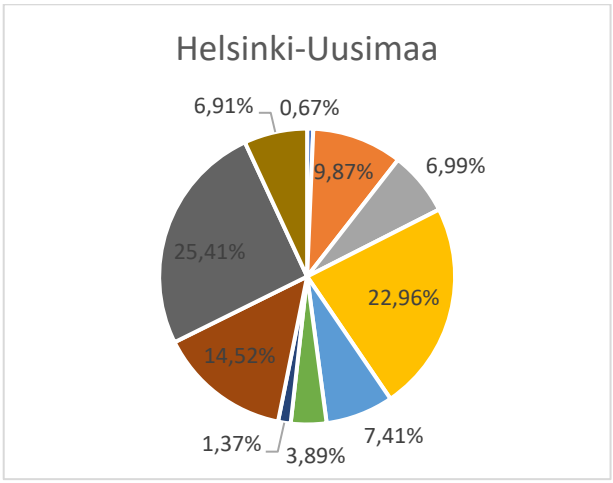
(Eurostat 2020)

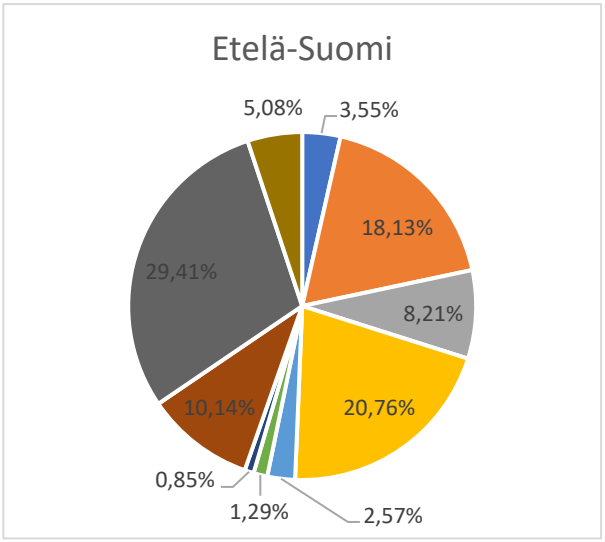
A. Agriculture, forestry and fishing
B. Industry (except construction)
C. Construction
D. Wholesale and retail, transport, accommodation and food service activities
E. Information and communication
F. Financial and insurance activities
G. Real estate activities
H. Professional, scientific and technical activities; administrative and support service
I. Public administration, defence, education, human health and social work activities
J. Arts, entertainment, and recreation; other service activities; activities of household and extra-territorial organisations and bodies

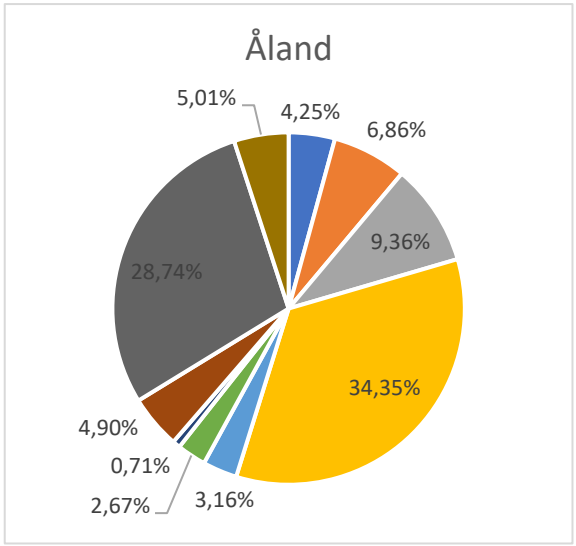


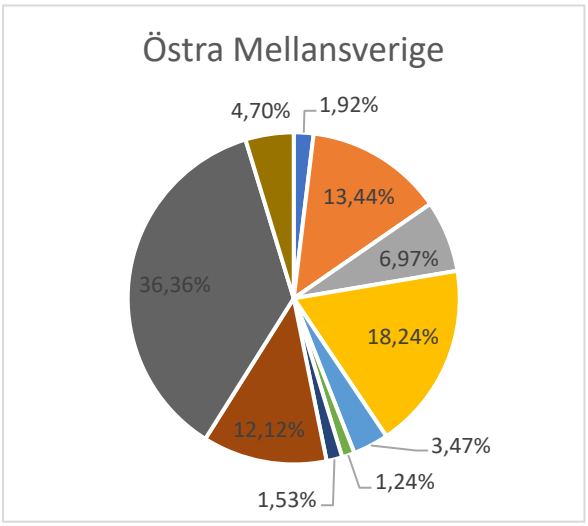


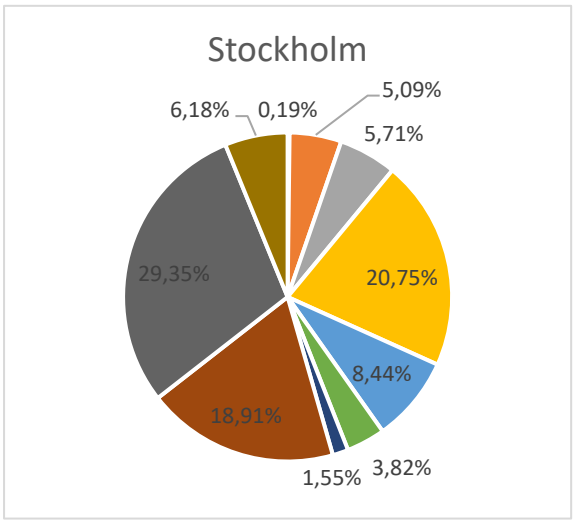


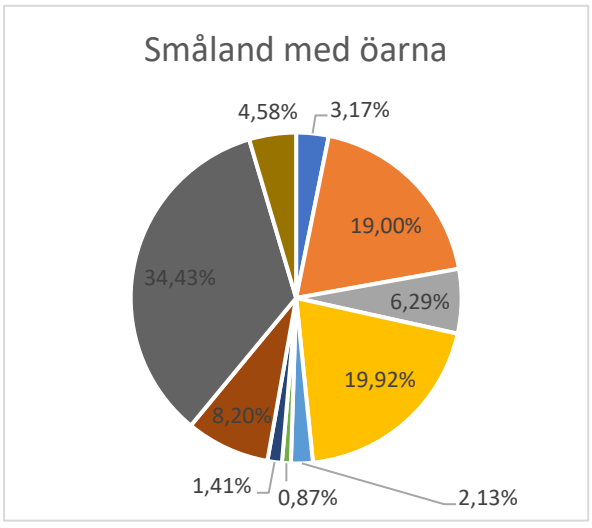


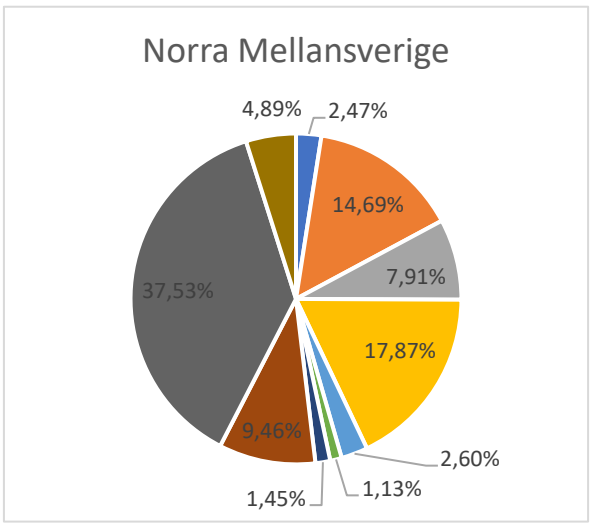

Etelä-Suomi
5,08%
3,55%
18,13%
29,41%
8,21%
10,14%
20,76%
0,85%
1,29%
2,57%


Åland
5,01%
4,25%
6,86%
9,36%
28,74%
34,35%
4,90%
0,71%
2,67%
3,16%


Östra Mellansverige
4,70%
1,92%
13,44%
6,97%
36,36%
18,24%
12,12%
3,47%
1,24%
1,53%

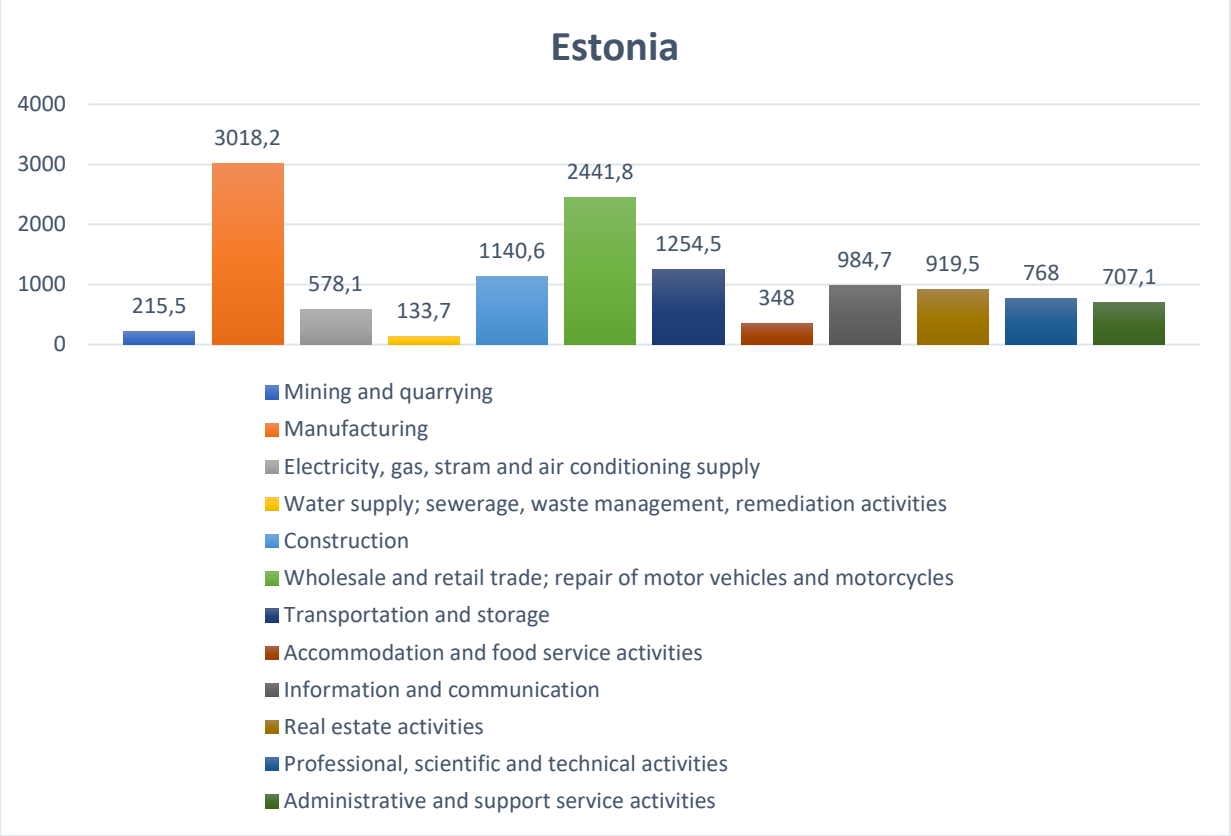

Stockholm
6,18%
0,19%
5,09%
5,71%
29,35%
20,75%
8,44%
18,91%
1,55%
3,82%

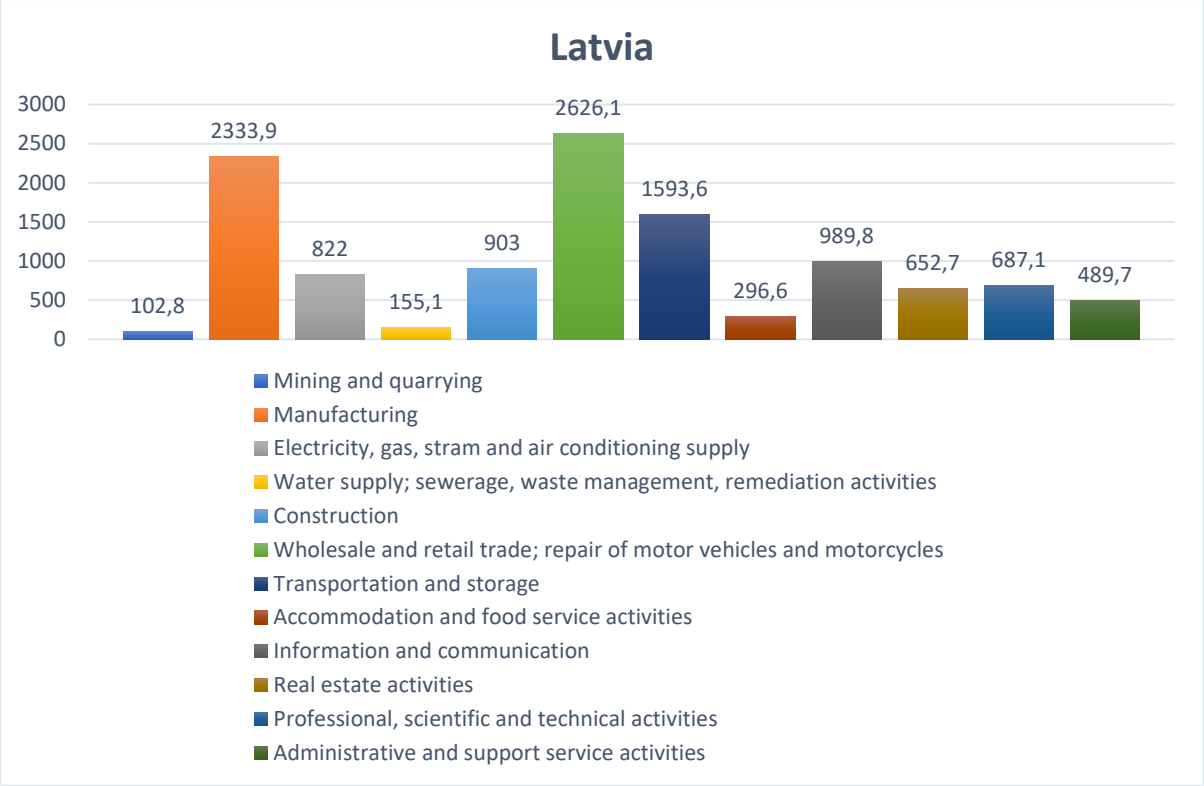

Småland med öarna
4,58%
3,17%
19,00%
34,43%
6,29%
19,92%
8,20%
1,41%
0,87%
2,13%

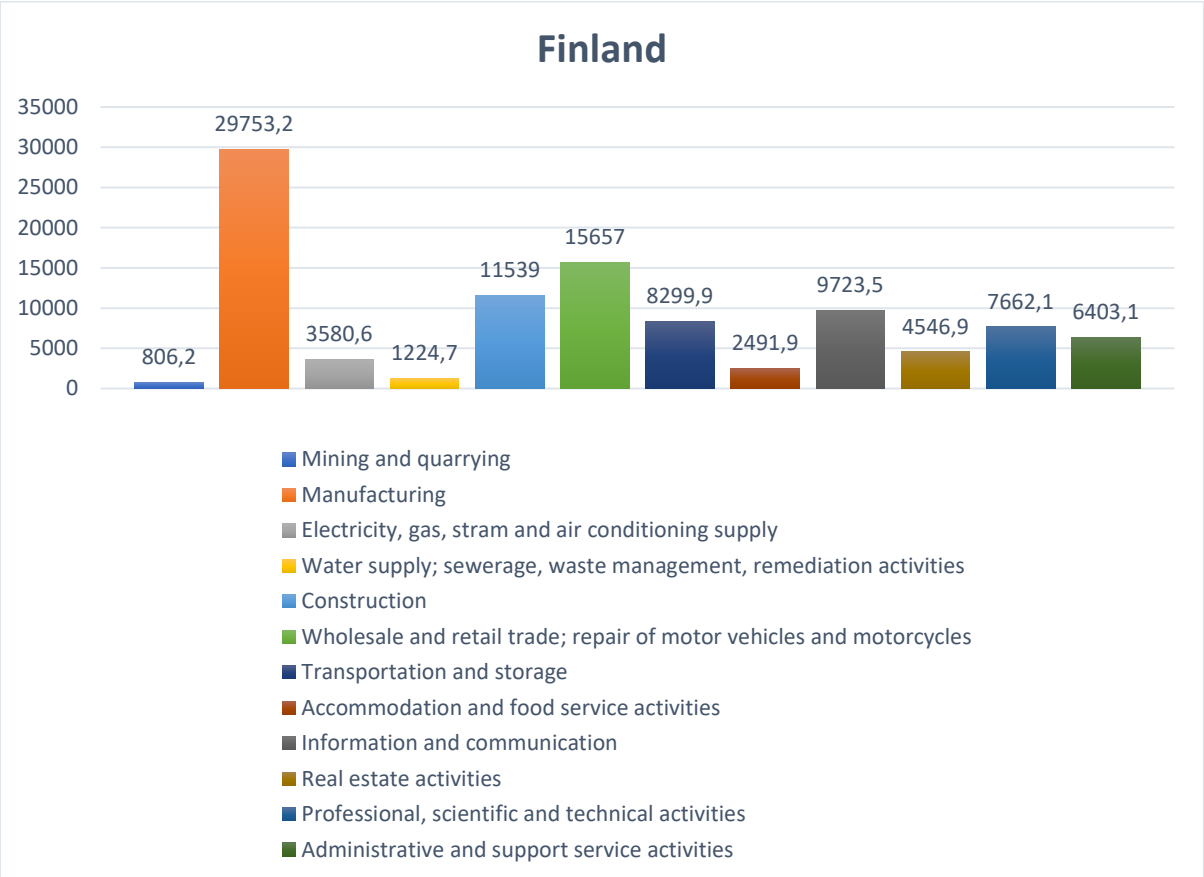

Norra Mellansverige
4,89%
2,47%
14,69%
7,91%
37,53%
17,87%
9,46%
2,60%
1,45%
1,13%

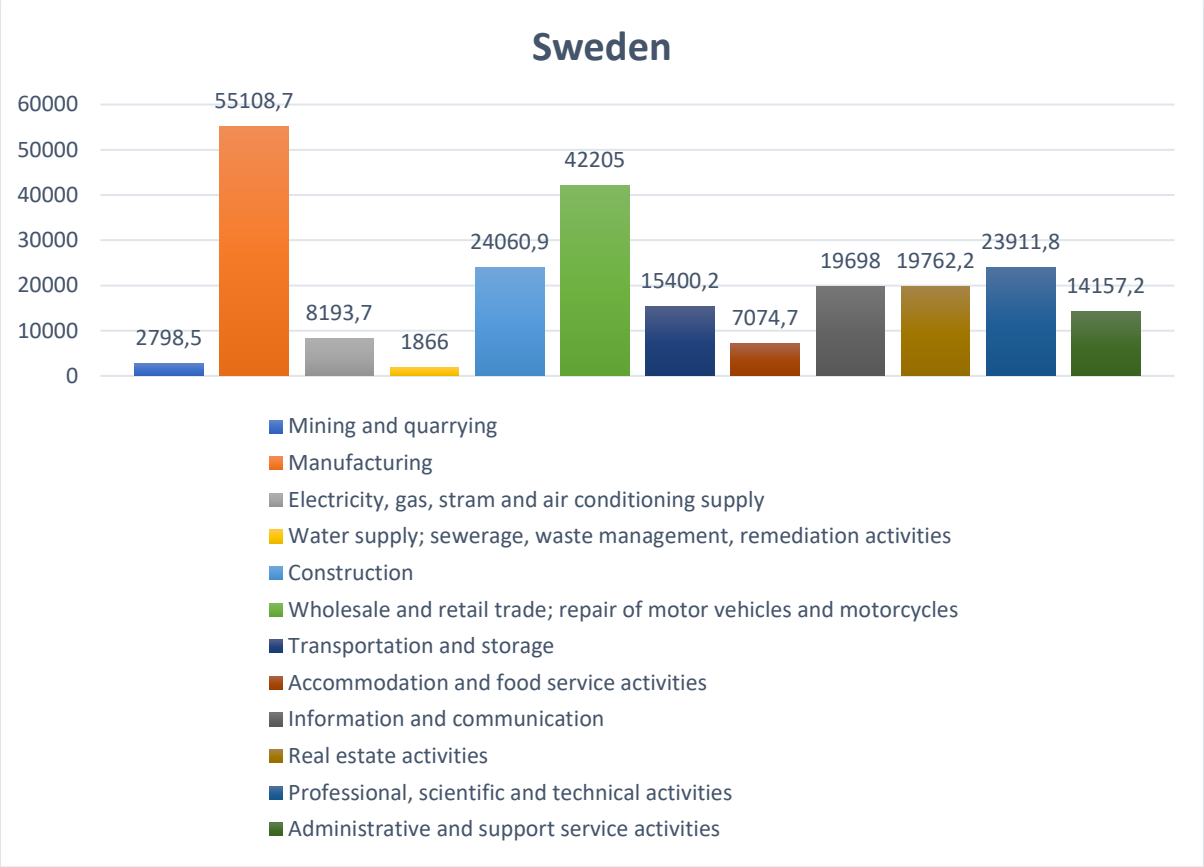
Annex 4. Value added by NACE Rev. 2 (million EUR), 2017

(Eurostat 2020)




Latvia
3000
2500
2000
1500
1000
500
0
102,8
2333,9
822
155,1
903
2626,1
1593,6
296,6
989,8
652,7
687,1
489,7
Mining and quarrying
Manufacturing
Electricity, gas, stram and air conditioning supply
Water supply; sewerage, waste management, remediation activities
Construction
Wholesale and retail trade; repair of motor vehicles and motorcycles
Transportation and storage
Accommodation and food service activities
Information and communication
Real estate activities
Professional, scientific and technical activities
Administrative and support service activities


Finland
35000
30000
25000
20000
15000
10000
5000
0
806,2
29753,2
3580,6
1224,7
11539
15657
8299,9
2491,9
9723,5
4546,9
7662,1
6403,1
Mining and quarrying
Manufacturing
Electricity, gas, stram and air conditioning supply
Water supply; sewerage, waste management, remediation activities
Construction
Wholesale and retail trade; repair of motor vehicles and motorcycles
Transportation and storage
Accommodation and food service activities
Information and communication
Real estate activities
Professional, scientific and technical activities
Administrative and support service activities


Sweden
60000
50000
40000
30000
20000
10000
0
2798,5
55108,7
8193,7
1866
24060,9
42205
15400,2
7074,7
19698
19762,2
23911,8
14157,2
Mining and quarrying
Manufacturing
Electricity, gas, stram and air conditioning supply
Water supply; sewerage, waste management, remediation activities
Construction
Wholesale and retail trade; repair of motor vehicles and motorcycles
Transportation and storage
Accommodation and food service activities
Information and communication
Real estate activities
Professional, scientific and technical activities
Administrative and support service activities

Annex 5. Economy profiles of Central Baltic countries

(Global Competitiveness report 2019)

Estonia

31st/141

Global Competitiveness Index 4.0 2019 edition

Rank in 2018 edition: 32nd/140

Performance Overview 2019

Compare with ◇ No comparator

Finland

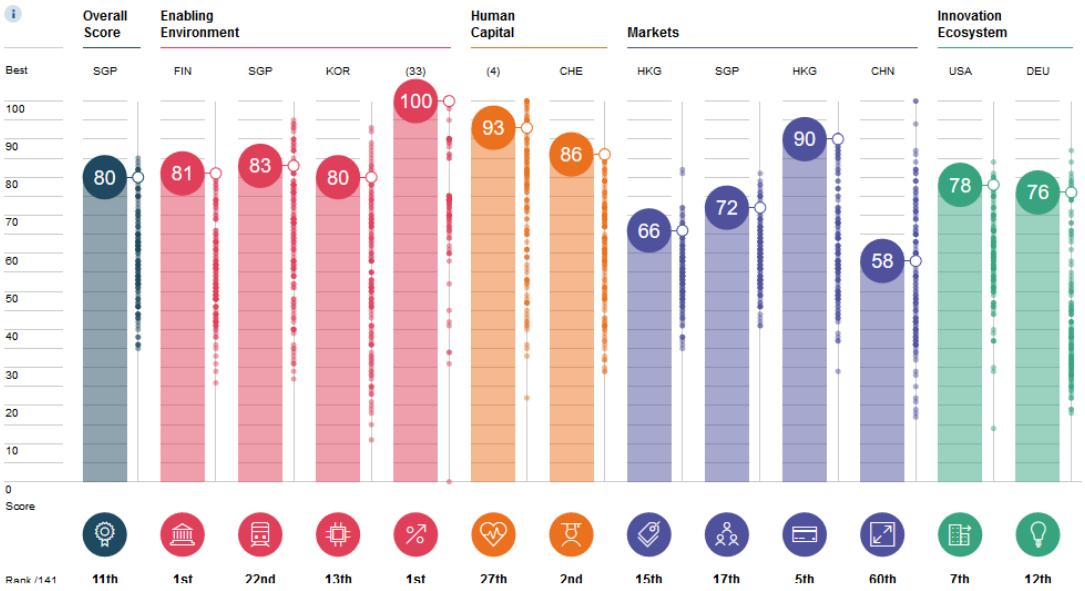
11th/141

Global Competitiveness Index 4.0 2019 edition

Rank in 2018 edition: 11th/140

Performance Overview 2019

Compare with ◇ No comparator



Latvia

41st/141

Global Competitiveness Index 4.0 2019 edition

Rank in 2018 edition: 42nd/140

Performance Overview 2019

Compare with ◇ No comparator

Sweden

8th/141

Global Competitiveness Index 4.0 2019 edition

Rank in 2018 edition: 9th/140

Performance Overview 2019

Compare with ◇ No comparator

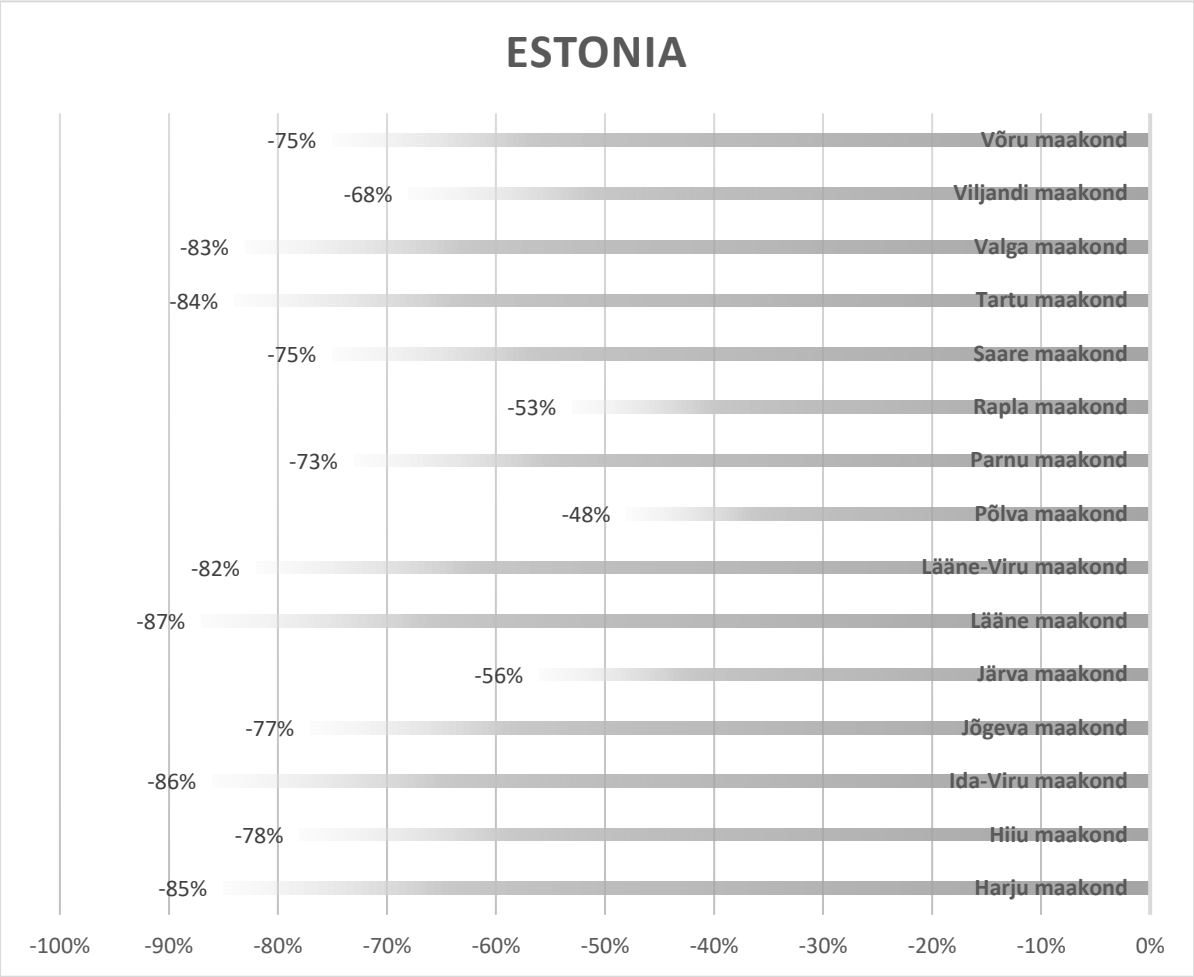
Annex 6. Review of University Rankings

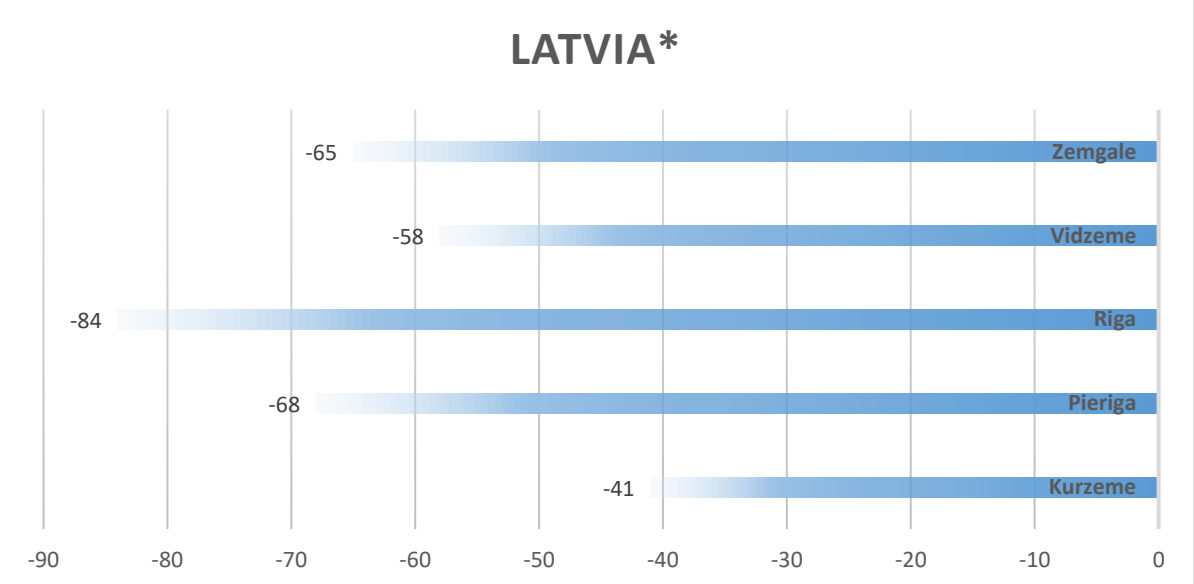
(Sources: Financial Times 2020, Webometrics 2020)

Country	University	Financial Times, European Business School Ranking, 2019
Sweden (Russia, Latvia)	Stockholm School of Economics	26
Finland	Aalto University	34
Finland	Hanken School of Economics	78
Country	**University**	**Webometrics University Ranking (Europe), Top 400, January 2020**
Finland	University of Helsinki	15
	Aalto University	67
	8 universities in Top 400	
Sweden	Uppsala University	21
	Lund University	23
	Karolisnka Institute	42
	Royal Institute of Technology	47
	University of Gothenburg	52
	Stockholm University	60
	Linköping University	68
	Chalmers University of Technology	99
	12 universities in Top 400	
Latvia	No universities in Top 100	
	No universities intTop 400	
Estonia	No universities in Top 100	
	1 university in Top 400, University of Tartu	

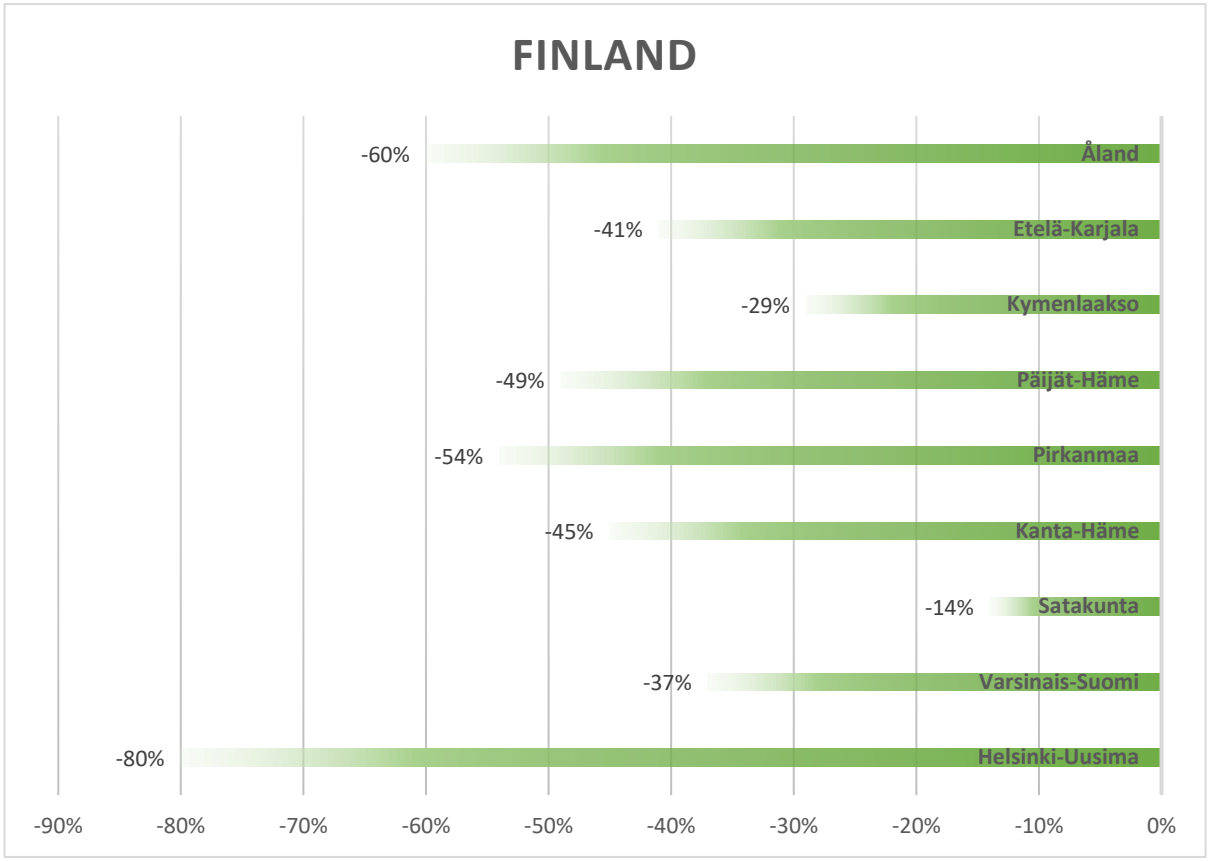
Annex 7. Covid-19 update: Nights spent change (%) June 2019, June 2020

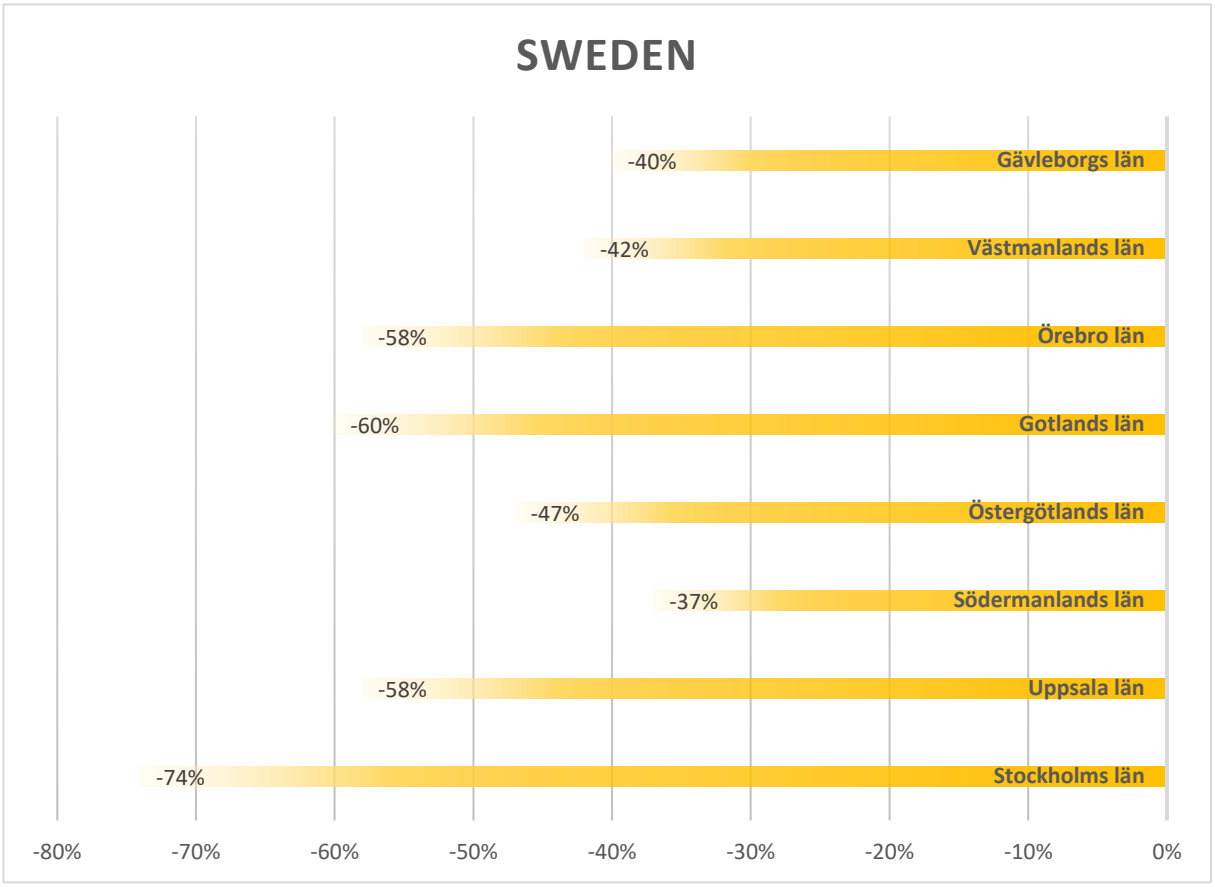
(Sources: National statistics bureaus 2020)





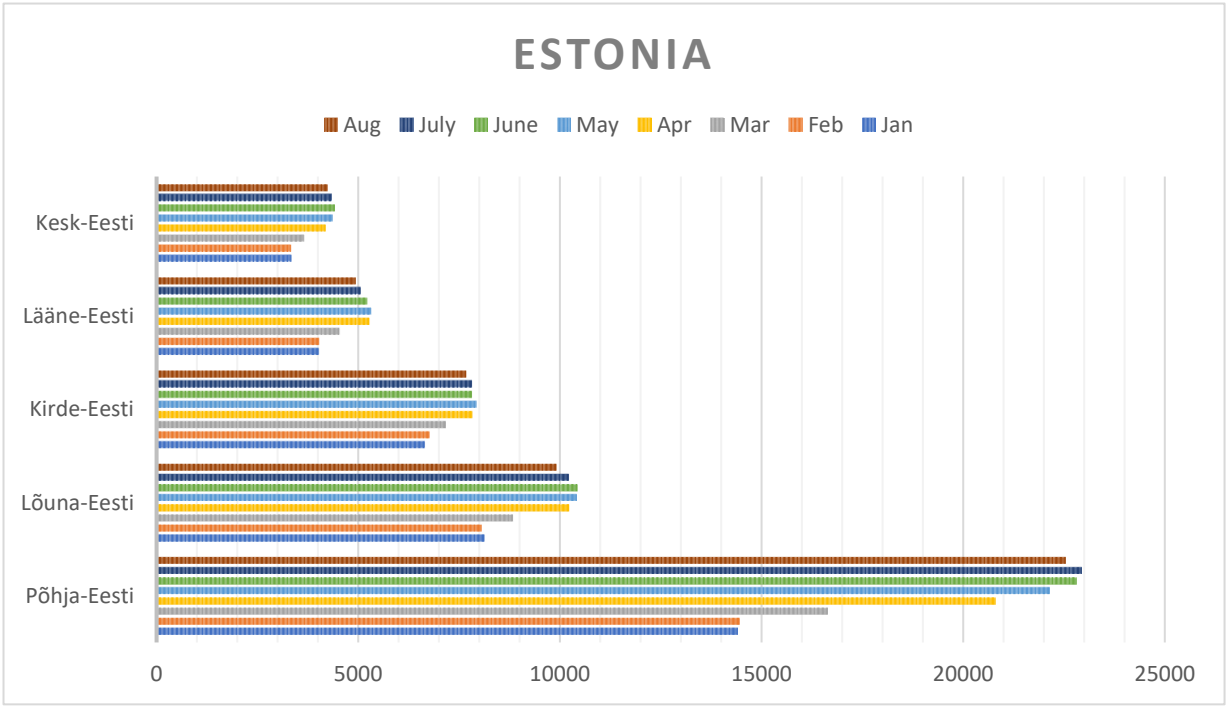
* Latvian regions change % 2nd quarter 2019 compared to 2nd quarter 2020

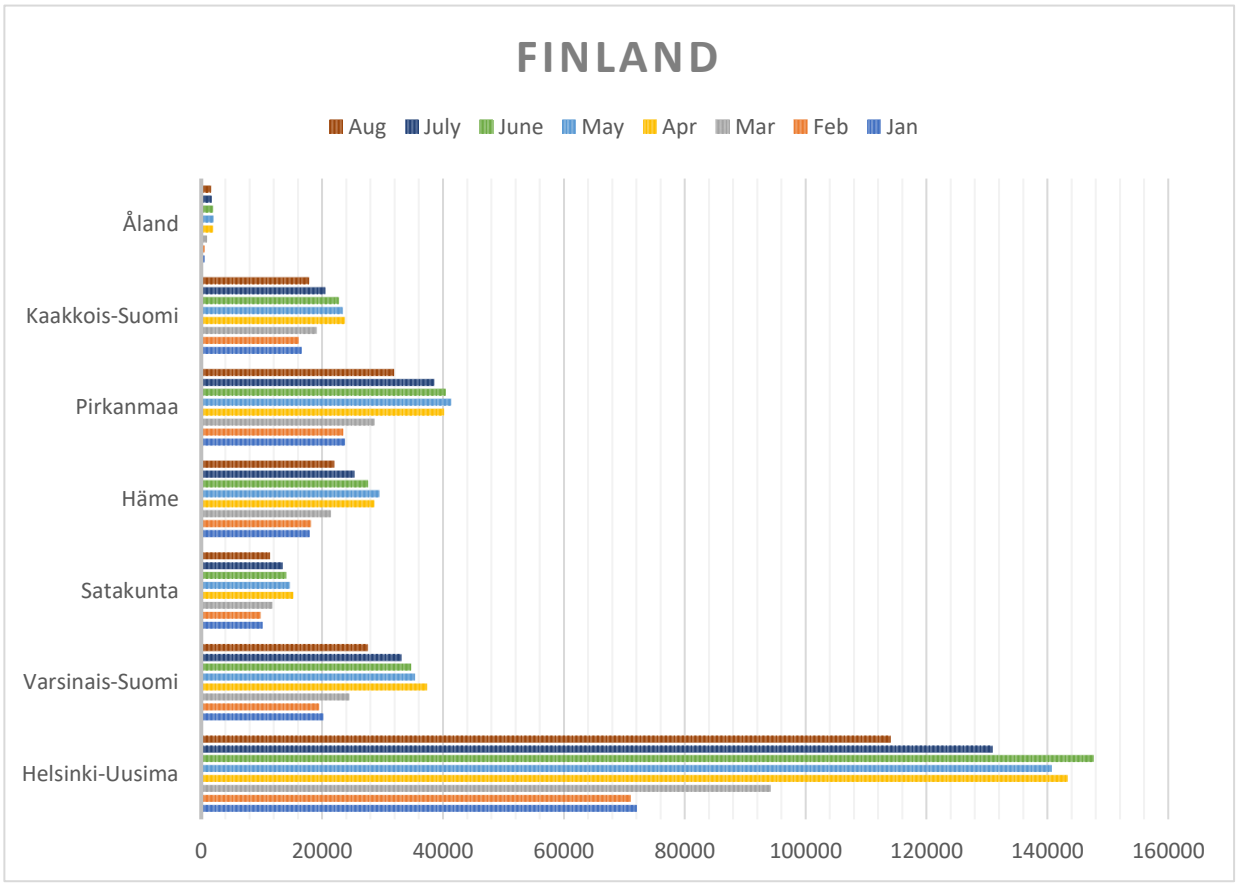

FINLAND
-60%
Åland
-41%
Etelä-Karjala
-29%
Kymenlaakso
-49%
Päijät-Häme
-54%
Pirkanmaa
-45%
Kanta-Häme
-14%
Satakunta
-37%
Varsinais-Suomi
-80%
Helsinki-Uusima
-90%
-80%
-70%
-60%
-50%
-40%
-30%
-20%
-10%
0%

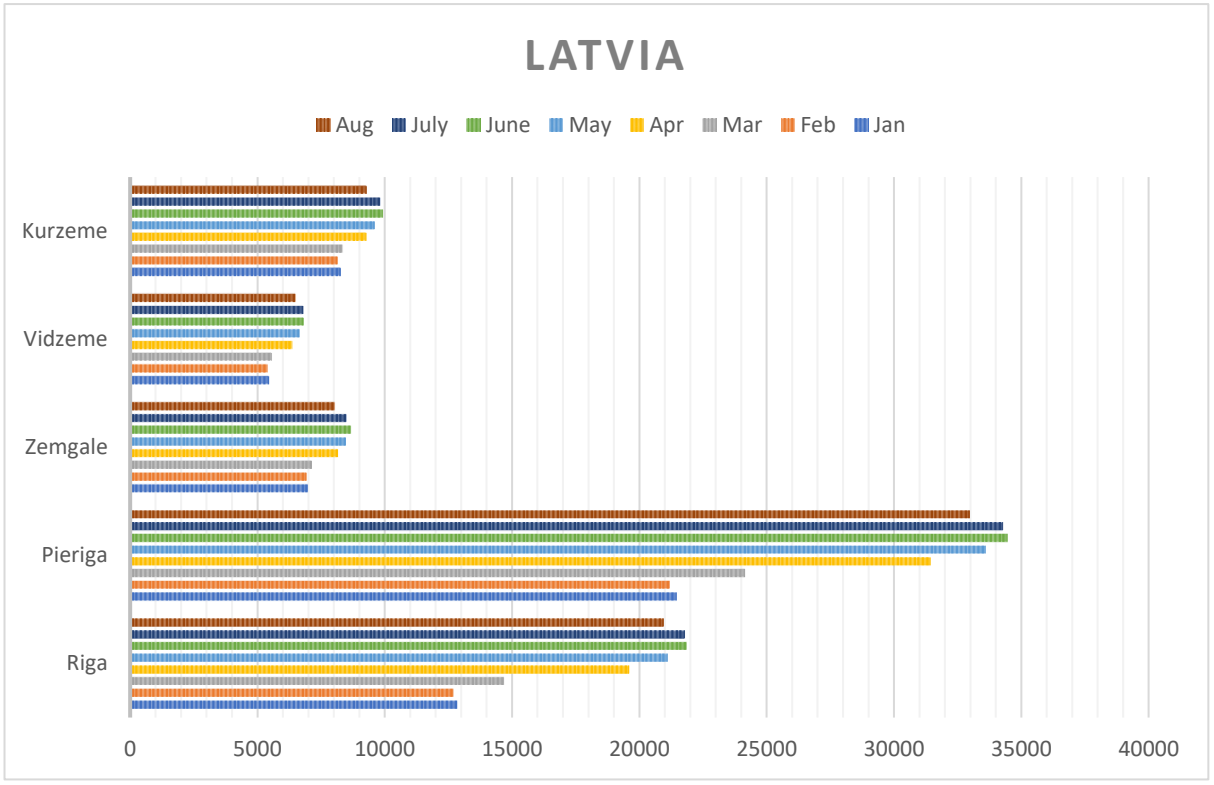

SWEDEN
-40%
Gävleborgs län
-42%
Västmanlands län
-58%
Örebro län
-60%
Gotlands län
-47%
Östergötlands län
-37%
Södermanlands län
-58%
Uppsala län
-74%
Stockholms län
-80%
-70%
-60%
-50%
-40%
-30%
-20%
-10%
0%

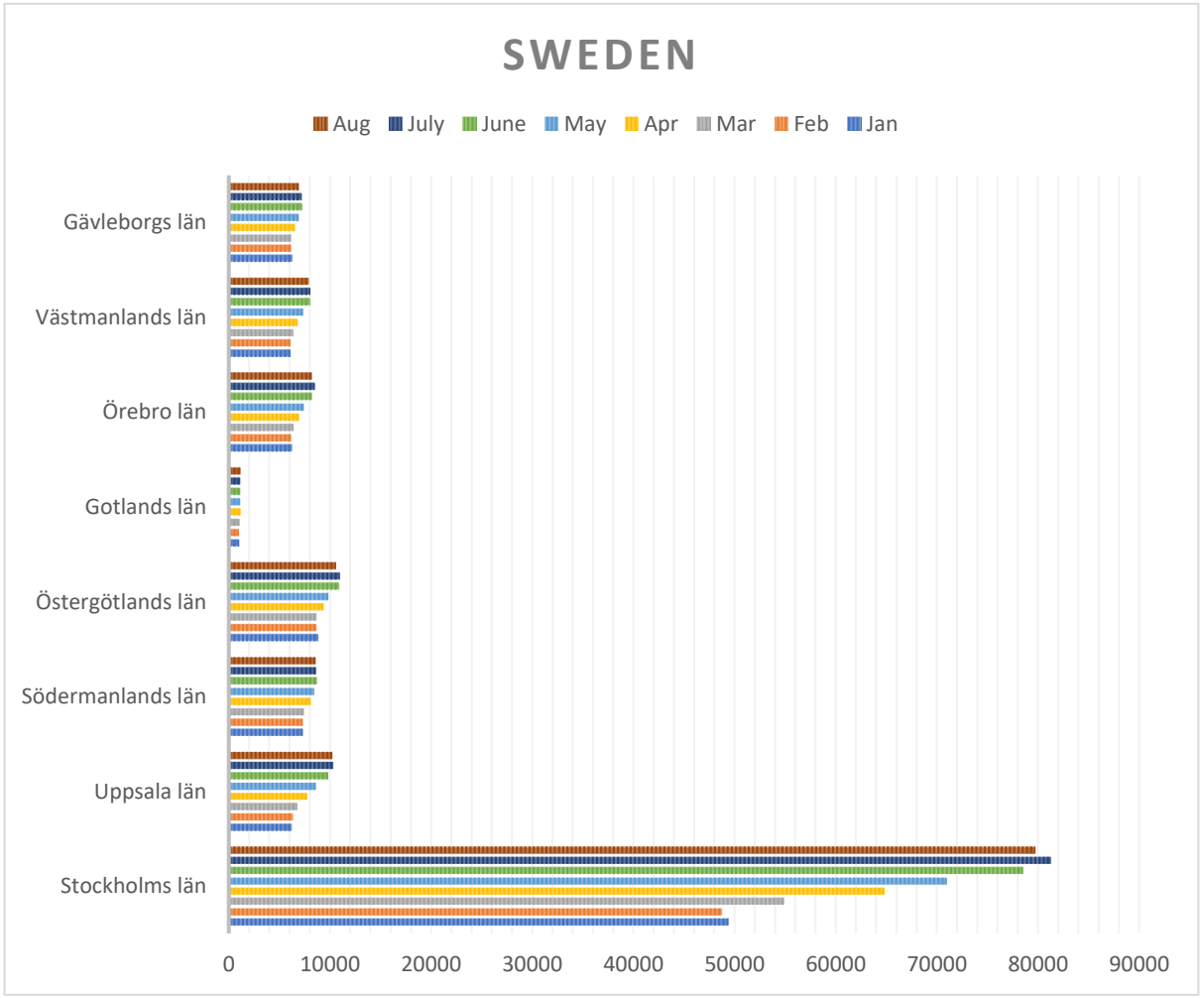
Annex 8. Covid-19 update: Amount of unemployed January 2020 – August 2020

(Sources: Eesti Töötukassa, Ministry of Economic Affairs and Employment of Finland, State Employment Agency Republic of Latvia, Swedish Public Employment Service)






LATVIA
Aug
July
June
May
Apr
Mar
Feb
Jan
Kurzeme
Vidzeme
Zemgale
Pieriga
Riga
0
5000
10000
15000
20000
25000
30000
35000
40000


SWEDEN
Aug
July
June
May
Apr
Mar
Feb
Jan
Gävleborgs län
Västmanlands län
Örebro län
Gotlands län
Östergötlands län
Södermanlands län
Uppsala län
Stockholms län
0
10000
20000
30000
40000
50000
60000
70000
80000
90000

Annex. 9. Regional sources to identify regional and national priorities for cross-border cooperation.

Åland

- Development and sustainability agenda for Åland

Estonia

- The Research commissioned by the Ministry of Finance (EST) with the aim of ensuring the better preparation and planning of Interreg programmes in the new (2021-2027) programming period. https://www.rahandusministeerium.ee/et/uuringud-ja-analuusid

- The daft of National Strategy „Estonia 2035“, https://www.riigikantselei.ee/et/eesti2035

- The Decisions of the Joint session of the Government of the Republic of Estonia and the governemnt of the Republic of the Finland (07.05.2018)

- The draft of the County Development Strategy of Saare County 2019-2030 (http://ruhnu.ee/documents/9698026/20986332/Saare+maakonna+arengustrateegia+2019-2030+veebi.pdf/dbdb0602-859b-4058-8cbc-a40de8faa225?version=1.0)

- The Developent Startegy of Lääne-Viru County https://www.riigiteataja.ee/aktilisa/4270/4201/9024/Viru-NigulaVVK_m57_lisa.pdf#

- The draft of the Development Plan of Tallinn City

- The Developent Startegy of Ida-Viru County https://ivol.kovtp.ee/documents/9867329/19704180/Ida-Viru+arengustrateegia+kinnitamiseks.pdf/1217950d-b837-4d85-aa25-9f1897368d91

- The Developent Startegy of Pärnu County http://arenduskeskus.parnumaa.ee/wp-content/uploads/2018/09/P%C3%A4rnumaa-arengustrateegia-07.09.2018.pdf

- Harju County Development Strategy 2035+ http://hol.ee/docs/file/harju%20strat%20210x297mm%2022_05_2019.pdf

Consultations with the regions, ministries, Tallinn City Government and Association of Estonian Cities and Municipalities

Latvia

Consultations with the line ministries and regions based on the National Development Plan 2027

Finland

- Kymenlaakso Regional Program:

https://www.kymenlaakso.fi/aluekehitys/maakuntaohjelma/kymenlaakso-ohjelma-2018-2021

- Kymenlaakso RIS3-strategy:

https://www.kymenlaakso.fi/aluekehitys/alykkaan-erikoistumisen-strategia

- Roadmap to a carbon neutral Kymenlaakso

https://www.kymenlaakso.fi/aluekehitys/hiilineutraali-kymenlaakso-2040

Satakunta Regional Programme 2018–2021 (EN, abstract)

Satakunnan maakuntaohjelma 2018-2021 (FI, programme in finnish)

RIS3

Satakunta Regional Programme 2018–2021

Satakunnan teollisuuden kasvuohjelma - Teollisuuspilotti (FI),

Satakunta industrial growth programme (EN)

Satakunnan bio- ja kiertotalouden kasvuohjelma *(*FI, page 17, 5. action)

Satakunta Regional Programme 2018–2021

RIS3

Satakunnan matkailun kasvuohjelma (FI, actions 12,13,14,16)

Satakunnan kulttuuristrategia (FI, page 13, 3. action)

Helsinki-Uusimaa Regional Programme 2.0

https://www.uudenmaanliitto.fi/files/21428/Helsinki-Uusimaa_regional_programme_2.0_(A40-2018).pdf

Smart Specialisation in the Helsinki-Uusimaa Region. Research and Innovation Strategy for Regional Development 2014–2020 (Urban Cleantech and Citizen City spearheads)

https://www.uudenmaanliitto.fi/files/16166/Smart_Specialisation_in_Helsinki-Uusimaa_Region_-_Research_and_Innovation_Strategy_for_Regional_Development_2014-2020_B_51_-_2015.pdf

Big Five Partnership – Analysis of the Regional Research and Innovation Strategy for the Helsinki-Uusimaa Region and its Cooperation with the Peer Regions

https://www.uudenmaanliitto.fi/files/24776/Big_five_Partnership.pdf

Road map for climate neutral Helsinki-Uusimaa 2035

https://www.uudenmaanliitto.fi/en/development_and_planning/regional_programming/climate_neutral_helsinki-uusimaa_2035

https://ec.europa.eu/commission/presscorner/detail/en/ip_20_416

https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf

https://kumppanuusfoorumi.fi/alykas-erikoistuminen/

https://kumppanuusfoorumi.fi/partnership-forum/smart-specialisation/

https://www.esitteemme.fi/southwest-finland/MailView/

https://www.merialuesuunnittelu.fi/

https://itameri.fi/fi-FI

https://circulareconomy.europa.eu/platform/en/strategies/southwest-finlands-circular-economy-roadmap

http://www.kasvuvyohyke.fi/pohjoinen-kasvuvyohyke

https://www.varsinais-suomi.fi/images/tiedostot/Tietopankki/2014/maakuntastrategia_netti.pdf

https://turkubusinessregion.com/

https://ficanwest.fi/

https://www.varsinais-suomi.fi/images/tiedostot/Tietopankki/2014/maakuntastrategia_netti.pdf

https://turkubusinessregion.com/

https://www.unwto.org/

https://www.visitturku.fi/

https://www.varsinais-suomi.fi/images/tiedostot/Tietopankki/2014/maakuntastrategia_netti.pdf

https://eacea.ec.europa.eu/national-policies/eurydice/finland/life-long-learning-strategy_en

https://ennakointiakatemia.fi/

https://www.sitra.fi/en/topics/lifelong-learning/

https://www.oph.fi/en/education-system/finnish-vocational-education-and-training

https://minedu.fi/documents/1410845/4150027/Lifelong+and+continuous+learning+in+Finland.pdf/8cc84ec0-06bf-583b-1a45-38dec497da3d/Lifelong+and+continuous+learning+in+Finland.pdf

https://eacea.ec.europa.eu/national-policies/eurydice/content/national-reforms-vocational-education-and-training-and-adult-learning-21_en

South Karelian Regional Programme

https://www.ekarjala.fi/regional-council/planning-and-development/regional-development/regional-plan-of-south-karelia/

Full Regional Programme document in Finnish

https://www.ekarjala.fi/liitto/maakuntasuunnittelu/aluekehittaminen/maakuntaohjelma-2018-2021/

South Karelia RIS

https://www.ekarjala.fi/regional-council/planning-and-development/regional-development/smart-specialisation-in-south-karelia/

and South Karelian Regional Programme

Full RIS document in Finnish

https://www.ekarjala.fi/liitto/wp-content/uploads/sites/2/aluekehittaminen/Etel%C3%A4-Karjalan-Innovaatiostrategia-2018-2021-PDF-verkkoon.pdf

South Karelia Regional Programme

Häme-ohjelma

Smart Tavastia

Päijät-Hämeen strategia ja maakuntaohjelma vuosille 2018-2021

Regional Strategy of Tampere Region can be found in

https://www.pirkanmaa.fi/wp-content/uploads/Maakuntaohjelma2018_2020.pdf

Sweden

RUS – Vårt Gotland 2040

https://rus.gotland.se/?page_id=1885

Tillväxtprogram för Gotland 2016-2020

https://gotland.se/94617

RUS – Vårt Gotland 2040

https://rus.gotland.se/?page_id=1885

Tillväxtprogram för Gotland 2016-2020

https://gotland.se/94617

RUS – Vårt Gotland 2040

https://rus.gotland.se

Tillväxtprogram för Gotland 2016-2020

https://gotland.se/94617

Strategy for sustainable economic and regional growth of Gävleborg, (RUS)

Strategy for regional innovation development of Gävleborg (RIS3)

County transport strategy

Regional plan for food supply.

Strategy for regional innovation development of Gävleborg (RIS3)

Uppsala County Regional development strategi

RUFS 2050

REGIONAL UTVECKLINGSPLAN FÖR STOCKHOLMSREGIONEN

Europas mest attraktiva storstadsregion

Länsstyrelsen Stockholm. Strategisk inriktning för hållbar tillväxt och attraktionskraft i Stockholms län 2025+

En nationell strategi för hållbar regional tillväxt och attraktionskraft 2015–2020. Regeringskansliet.

Länsstyrelsen Stockholm. Strategisk inriktning för hållbar tillväxt och attraktionskraft i Stockholms län 2025+

Regionalt tillväxtarbete efter 2020. Regionernas framtida prioriteringar. Tillväxtverket

RUFS 2050

REGIONAL UTVECKLINGSPLAN FÖR STOCKHOLMSREGIONEN

Europas mest attraktiva storstadsregion

Länsstyrelsen Stockholm. Strategisk inriktning för hållbar tillväxt och attraktionskraft i Stockholms län 2025+

RUS PM Dialogue (PM Dialogunderlag, en regional utvecklingsstrategi) and Missive on the basis of an offer to present priorities regarding future regional growth. (Skrivelse med anledning av erbjudande att redovisa prioriteringar avseende det framtida regionala tillväxtarbetet, beslutsunderlag)

RUS PM Dialogue (PM Dialogunderlag, en regional utvecklingsstrategi) and Missive on the basis of an offer to present priorities regarding future regional growth. (Skrivelse med anledning av erbjudande att redovisa prioriteringar avseende det framtida regionala tillväxtarbetet, beslutsunderlag)

RUS PM Dialogue (PM Dialogunderlag, en regional utvecklingsstrategi) and Missive on the basis of an offer to present priorities regarding future regional growth. (Skrivelse med anledning av erbjudande att redovisa prioriteringar avseende det framtida regionala tillväxtarbetet, beslutsunderlag)

Västmanland County Regional development strategy

Regional development strategy of Region Örebro County (RUS)

Action plan for political impact on infrastructure and transport

Regional transport infrastructure regional plan 2018-2029

The Council of the Stockholm Mälar Region: Macro regional system analysis

The Council of the Stockholm Mälar Region: Macro regional freight strategy

The Council of the Stockholm Mälar Region: 11 positions for international accessibility and competitiveness

Regional development strategy of Region Örebro County (RUS)

Örebro County Energy and Climate Plan

Regional development strategy of Region Örebro County (RUS)