

Quarterly Bulletin of Statistics Estonia



2/2018

An overview of social
and economic
developments
in Estonia

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2/2018

STATISTICS ESTONIA

TALLINN 2018

EXPLANATION OF SYMBOLS

...	data not available or too uncertain for publication
..	category not applicable
x	data are confidential
M	males
F	females

The publication is based on Statistics Estonia's data, unless specified otherwise.

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Published by Statistics Estonia,
Tatari 51, 10134 Tallinn

June 2018

ISSN 2346-6049

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ECONOMIC GROWTH IN ESTONIA INCREASED SIGNIFICANTLY

Robert Mürsepp

Economic growth in Estonia was broad-based. In the previous years, the growth was largely due to internal consumption, whereas in 2017, the growth became more broad-based. The role of household consumption decreased. After years of decline, investments began to increase again as a result of improved economic climate, indicating a positive mind-set of entrepreneurs.

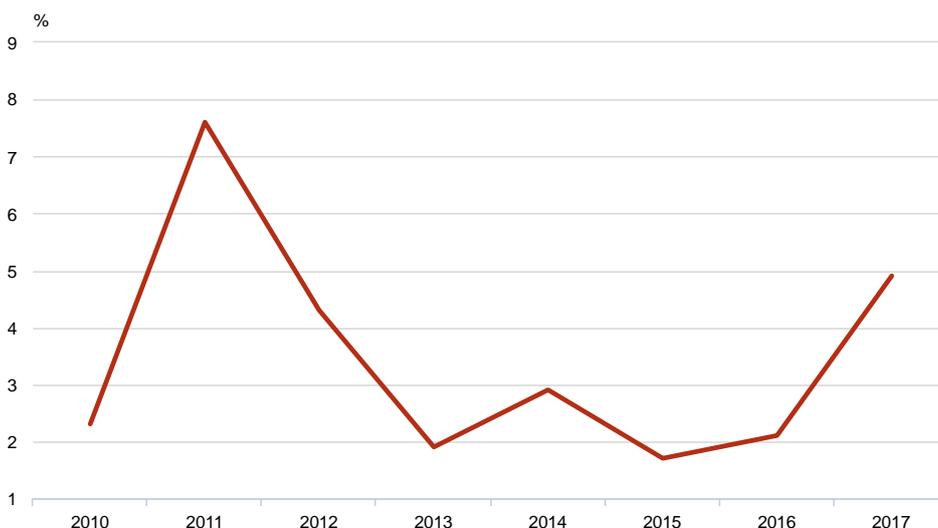
In 2017, the global economic growth increased slightly. In previous years, the annual global economic growth had remained around 3%, whereas in 2017, it increased to 3.5%. The growth accelerated primarily because the economies of the developed world fared better. The economic growth in OECD countries was 2.5% last year, whereas the year before it was 1.8%. In the last two years, GDP growth in the United States was 2.3% and 1.5%, respectively. China's economy, on the other hand, is exhibiting a continuously declining growth rate. Nevertheless, China's economy grew by 6.8% last year. Russia finally managed to escape international sanctions and the economic crisis driven by the low price of petroleum last year. After two years, its economy was on the rise again, with a growth rate of 1.8%.

Regardless of the favourable economic environment, the global government debt is still on the rise, reaching 59.9% of the gross world product last year. While Estonia has labour shortage, unemployment is a growing issue on the global level. Global unemployment increased from 7.5% to 7.9% in 2017. Following the difficult year of 2016, international trade has increased again. The 1.5 trillion additional dollars in exports increased the total export volume to 17.3 trillion dollars. Imports have increased in the same magnitude as well.

The EU economy is in its best shape of recent years. The EU economy plays a significant part in the economy of the developed world, and in 2017, it yielded the highest growth rate of recent years – 2.5%. Even though in prior years the growth has been primarily sustained by new member states, in 2017, the economy of the euro area grew as much as that of the entire EU. Nevertheless, the growth rate in Eastern Europe is faster than that of old member states. The fastest economic growth in the EU was still in Ireland, with GDP increase of 7.8%, followed by Romania (6.9%) and Malta (6.6%). Last year was also positive for the economy of Greece, the last EU country to have experienced economic decline – its GDP increased 1.4%. It was also the slowest growth rate in the EU. Greece was followed by Italy (1.5%) and Belgium (1.7%).

As was the case with the global economy, economic growth in the EU was also facilitated by growing foreign trade. Foreign trade grew fastest in Lithuania, where exports increased by 13.2% and imports by 12.8%. It was followed by Slovenia (10.6% and 10.1%) and Romania (9.7% and 11.3%). The deceleration of the growth rate in investments, which amounted to 3.4%, is, however, somewhat alarming. In 2017, investments increased the most in Cyprus (27.8%), Hungary (16.8%) and Latvia (16.0%), whereas in Ireland investments declined by an astonishing 22.6%. Malta also experienced a significant decline (7.6%). The growth of final consumption expenditure, which increased by 1.7% last year, decelerated as well. The growth of final consumption expenditure was highest in Romania (8.4%), followed by Latvia (4.8%) and Bulgaria (4.5%).

GDP chain-linked volume change, 2010–2017



Source: Statistics Estonia

Economic growth in Estonia increased significantly and the Estonian economy was one of the fastest growing economies in the EU in 2017. Despite the local labour shortage and intense wage pressure, Estonia's GDP grew by 4.9% last year. Although the growth of unit labour cost (indicates the ratio of labour compensations to GDP) has slightly declined despite continuous wage pressure, the growth is still relatively rapid at 12.6%. The change of this indicator was faster only in Latvia

(14.8%) and Lithuania (16.2%). According to the Macroeconomic Imbalances Procedure scoreboard of the European Commission, which evaluates the average change in unit labour cost over three years, this trend is unsustainable for the Baltic countries. The accelerated economic growth was also accompanied by a slight productivity growth in 2017. The growth of labour productivity per person employed increased by 2.0% and per working hour by 1.9%.

Economic growth in Estonia was broad-based in 2017. The value added in manufacturing, the largest economic activity, increased 3.9%. Even though the growth decelerated slightly in the second quarter (1.4%), manufacturing displayed great overall improvement throughout the entire year. The fastest growth in value added was in mining and quarrying, which emerged from a short-term crisis and where value added increased by as much as 46.1%. This economic activity also experienced strong growth throughout the year. The largest contributor to GDP growth was construction with a 17.8% growth of value added, contributing almost a fifth (0.9%) of the GDP growth. The rapidly developing economic activities of information and communication (15.6% and 0.8% of GDP growth), and professional, scientific and technical activities (13.9% and 0.6% of the GDP growth) contributed substantially as well. Trade increased by a modest 1.8% last year.

Only a few activities affected economic growth negatively in 2017. Value added of agriculture, forestry and fishing decreased 1.1%. However, the decline occurred only in the first half of the year, as the value added began to increase at the same pace as the rest of the economy in the second half. Value added also declined in real estate activities (1%) and in other service activities (2.1%).

Domestic demand increased by 4.2% last year, which was slightly slower than economic growth. Private consumption in Estonia increased by 2%, which was similar to the general trend in Europe. Private expenditures increased the most on communication (7.7%) and clothing and footwear (5.7%). Expenditures on food and non-alcoholic beverages increased merely by 0.5%. Expenditures on alcohol and tobacco were still on decline (7.1%) due to a rise of excise duty. Expenditures on education decreased by a significant 5.8% as well. By commodity chapter, expenditure increased the most on durable goods (6.9%), followed by semi-durable goods (5.4%). Expenditures on non-durable goods decreased by 0.7%. Expenditures on services increased by 3.4%.

After several years of decline, investments began to grow again. Aside from modest growth in consumption, domestic demand was driven by gross fixed capital formation. Following a three-year decline, investments grew by 13.1% last year. All major types of investments exhibited growth: investments increased in buildings and structures, transport equipment as well as machinery and equipment. However, the picture was more diverse across activities. Investments declined in trade and construction, whereas the growth of investments was rapid in manufacturing as well as transportation and storage (34.6% and 39.7%, respectively).

The improved economic climate was also reflected in the economic sentiment index measured by the Estonian Institute of Economic Research, which has not been as high since 2011. Manufacturing, construction as well as trade enterprises are optimistic about the future. Consumers are the most cautious about the future, but even their confidence increased last year.

Estonia's foreign trade increased along with overall economic growth. Exports increased by 3.5% and imports saw a slightly more rapid increase than usual at 3.9%. Even though the turnaround of manufacturing and investments has facilitated the foreign trade of goods, services are becoming increasingly important. Goods and services increased at a similar rate in imports (3.6% and 4.7%, respectively), whereas exports was mainly driven by the outward sale of services. The export of goods increased by 2.0%, whereas the export of services increased as much as 6.5%. Estonia's main exported services are business, travel and transport services.

The consumption of the general government sector increased by a mere 0.8%, despite the increased expenditures in the second half of the year due to the EU Presidency. The government consolidated debt also continued to decrease last year. At 9% of the GDP in 2017, it was the lowest in the EU. In terms of the ratio of government debt to the GDP, Estonia is closest to Luxembourg, where it accounts for 23% of the GDP. The largest government debt in the EU is in the crisis-torn Greece, where it was as high as 179% of the GDP. Even though Estonia's government debt is the lowest in the EU, it is not the only country where the debt is showing a decreasing trend.

SOCIAL PROTECTION EXPENDITURE ON THE RISE

Marin Tasuja

In 2017, the social protection field was mostly characterised by growth trends: the average old-age pension exceeded 400 euros, labour market measures are being used more and there is a greater variety of them, the expenditure on family allowances increased and new allowances for large families were added. The number of old-age pensioners and subsistence benefit recipients has declined.

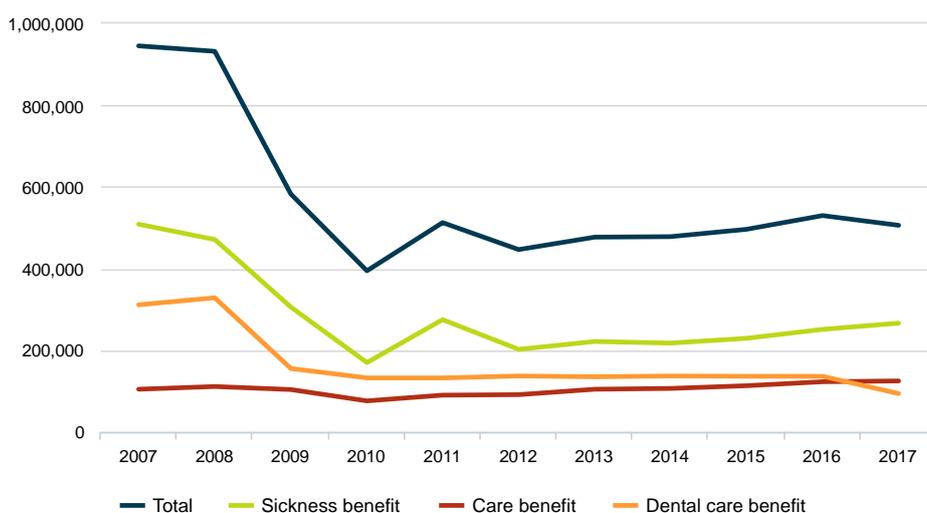
At the beginning of 2018, there were approximately 375,600 pensioners in Estonia, most (81%) of them old-age pensioners. While the total number of pensioners has been constantly increasing in recent years, it decreased by more than 41,000 year on year by early 2018. As a result, the percentage of pensioners in the population dropped to a level (28.5%) last seen 10 years ago. This is due to the 2016 work ability reform, which has substantially reduced the number of recipients of the pension for incapacity for work among all pensioners. While in early 2017, there were approximately 95,000 persons receiving the pension for incapacity for work in Estonia – almost a quarter of all pensioners –, a year later, there were 41% fewer of them, and their proportion had decreased to 15% of all pensioners. According to the new methodology, reduced work ability is assessed instead of assessing incapacity for work. At the end of 2017, there were 43,900 persons with reduced work ability in Estonia, almost a third of whom were assessed as having no work ability.

The average pension continued to increase in 2017. The increase was the fastest in recent years, reaching the highest level since the economic crisis. In 2017, the average pension increased by 7%. The average old-age pension exceeded the 400-euro margin and increased by 19 euros year on year. An old-age pensioner received an average of 386 euros per month in 2016 but 405 euros per month in 2017. The average pension for incapacity for work was 233 euros (an increase of 13 euros), survivor's pension 197 euros (an increase of 10 euros) and national pension 137 euros (an increase of 11 euros) per month.

Due to increasing life expectancy and ageing of the population, there is an increasing need for care services for adults. In 2016, special care services were provided by 145 institutions and general care services provided outside home by 152 institutions. Over the past decade, the number of care service providers has increased by almost 50%. There were 20 new institutions in 2016 (most of them were providing special care services). At the end of the year, there were 13,200 adult users of care services (including almost 5,600 users of special care services), i.e. almost 4% more than in the previous year. In 2016, there were 39 providers of the substitute home service for children; the service was used by fewer than 1,100 children. While the number of children in substitute homes has remained largely the same in recent years, it has decreased by 35% over the past decade.

The number of disabled persons continues to grow. At the beginning of 2018, there were 153,000 disabled persons in Estonia, constituting 11.6% of the total population. The number of disabled persons increased by more than 3,000 in 2017, having increased in recent years by approximately 2% year on year. The percentage of disabled persons is the highest among the elderly. At the beginning of 2018, a quarter of persons aged 55 or over were disabled but a mere 5% among those younger than 25. In 2017, over 67 million euros was paid as social benefits for disabled persons – 4% more than in 2016.

Number of health insurance benefits by type of benefit, 2007–2017

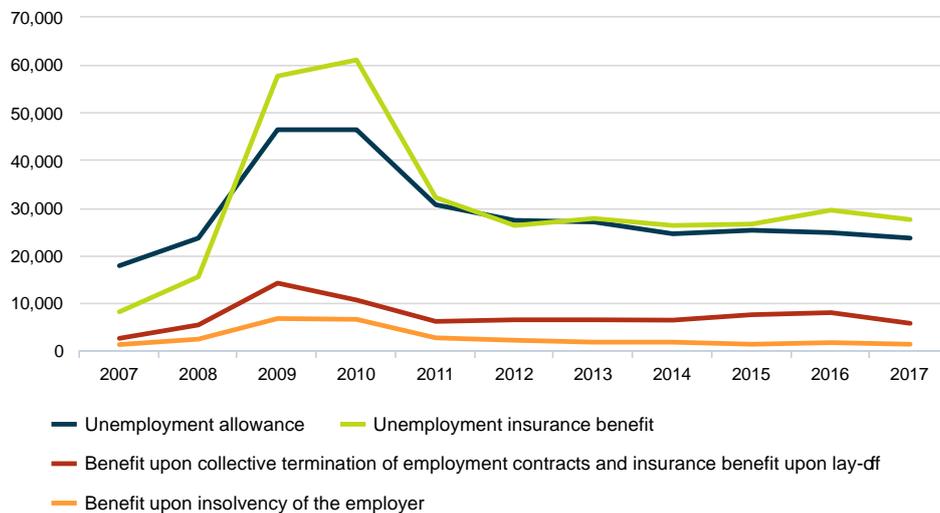


Source: Estonian Health Insurance Fund

Since the 2009 sick leave reform, which resulted in a decrease in the number of health insurance benefits by more than a third within a year, the number of benefits has remained largely stable. In 2017, the number of various benefits paid amounted to 506,000, which is 5% less than in the previous year. More than a half of all benefits were sickness benefits, a quarter were care benefits and almost a fifth were dental care benefits. Approximately 94,000 dental care and denture benefit applications were submitted in 2017. Over the past five years, the number of dental care benefits has decreased by almost a

third. This is due to changes in the dental care benefits system: a new adult dental care benefits system entered into force on 1 July 2017. The number of benefits has not increased because many dental clinics have not concluded the services contract with the Health Insurance Fund. In 2017, a total of 151 million euros was paid as health insurance benefits, which is 8% more than in the previous year. Sickness benefits and maternity benefits accounted for the largest share of these benefits (43% and 32%, respectively). The expenditure on dental benefits remained largely unchanged at 9 million euros. Various benefits accounted for a little more than a tenth of the expenditure covered by mandatory health insurance.

Number of recipients of unemployment benefits by type of benefit, 2007–2017



Source: Eesti Töötukassa

After the economic crisis, the number of unemployed persons decreased, and there is also less need for labour market allowances. The number of unemployment allowance recipients as well as the number of recipients of benefits paid to unemployed people have remained largely stable since 2011, and have shown a slight downward trend over the last year. In 2017, unemployment insurance benefits were paid to 27,400 persons, which is 7% less than in the previous year. Compared to 2010, when unemployment peaked (unemployment rate stood at 16.7%), the need for unemployment insurance more than halved. In 2017, unemployment allowance was paid to 23,500 persons (5% fewer compared to 2016), benefit upon lay-off to 5,700 persons (28% fewer) and benefit upon insolvency of the employer to 1,300 persons (19% fewer). The average unemployment insurance benefit in 2017 was 378 euros per month, which is 12 euros more than the year before. Upon lay-off, the average benefit was 1,757 euros and upon insolvency of the employer, 2,586 euros.

Labour market measures are being used increasingly. In 2017, the labour market services and programmes offered by Eesti Töötukassa (Estonian Unemployment Insurance Fund) were used approximately 117,000 times, which is 14% more than in 2016 (it is important to note that a person may use more than one service or programme). As in previous years, career counselling and labour market training were the most popular services, with both making up a sixth of all programmes. The use of services for working and inactive people is on the rise. Career counselling for that target group was used more than 14,000 times, which is more than a third more than the year before. Several new services were added in 2017 to help prevent redundancy and to help employers improve their employees' qualifications. The new measures were refresher training and retraining with a training card, degree study allowance and a training grant for employers. The new measures were used 1,300 times. People with reduced work ability participated in training courses 17,000 times – the most in work-related training, work-related rehabilitation and work trials.

The number of subsistence benefit recipients increased in 2016 but started to fall again a year later. During 2017, a total of 88,700 applications for subsistence benefit to ensure the subsistence level were approved, making it the smallest number of applications in nine years. Compared to the previous year, the number of applications decreased by a tenth. The number of households receiving the benefit decreased by 1,200 and totalled 14,100. The total amount paid for subsistence benefits decreased by 2.8 million euros compared to 2016, but was 2.8 million euros more than in 2015. An average benefit to ensure the subsistence level was 206 euros per application, which is the second biggest after the 2016 amount. In 2017, in addition to the subsistence level, a rise in households' standard of living, improving labour market indicators (the unemployment rate was the lowest in the past 9 years and the employment rate the highest in 20 years) and new types of benefits also affected the number of benefit recipients and benefit amounts.

There have been a number of changes to the procedure of payment of family and child allowances and benefits; as a result, the total amount paid for family allowances has increased rapidly over the past three years. In 2017, a total of 446.7 million euros was paid for various allowances (child allowance, parental benefit, childbirth allowance, child care allowance, etc.), which is 14% more than in 2016 and as much as 68% more than in 2014. For most allowances, the number of recipients has remained nearly unchanged. Of the changes which took effect in 2017, the most significant concerned large families. As of 1 July 2017, families with three to six children receive an additional 300 euros per month on top of the regular child allowance. For families with seven or more children, the allowance increased to 400 euros per month. The cost of the additional allowance for large families was 33.8 million euros, which made up 8% of the budget for all family allowances. The largest share, or nearly a half of the family allowances was paid as parental benefits and more than a third as child allowances.

The expenditure on social protection is still on the rise. The total expenditure is calculated by using the European system of integrated social protection statistics developed by Eurostat (ESSPROS; the data are transmitted by the end of June of year N + 2). In Estonia, 3.33 billion euros was spent on social protection in 2015. This was 11% more than in 2014 and the fastest growth since the economic crisis. The expenditure accounted for 16.4% of the GDP – the highest percentage in the past five years. In European Union (EU) comparison, Estonia is among those countries who spend less on social protection. In 2015, the total social protection expenditure accounted for the largest share in the GDP in France (33.9%), Denmark (32.3%) and Finland (31.6%). The share of social protection expenditure in the GDP was the lowest in Turkey, Romania and Latvia – less than 15%. In 2015, Estonian social protection expenditure per capita was 2,530 euros. Of the EU countries, Luxembourg spent the most on social protection (20,100 euros per capita) and Bulgaria the least (1,100 euros per capita).

Social protection includes financial support and services provided by the public and private sectors, which have been designed to help individuals and households to cope with social issues and risks – to find jobs, increase productivity, invest in healthcare and protect the ageing population. Social protection systems help reduce inequality and poverty risks by maintaining at least a basic income for those in need, by appreciating unpaid work and by giving people confidence for the future. Although the aid may be inadequate for many, a situation must be avoided where living on allowances gives people who are able to work an income equal to or exceeding the remuneration for work. Above all, social protection measures are meant to ensure that people remain as self-reliant as possible.

Social protection is mainly provided via social insurance and social assistance. In return for regular contributions, social insurance schemes provide an income for persons in need in the case of social risks (loss of job, illness, birth of a child, incapacity for work, old age, etc.). Social assistance is meant to improve the standard of living of the most vulnerable members of society, and to prevent poverty. Social protection statistics are based on administrative data sources. The institutions providing data to Statistics Estonia include the Ministry of Social Affairs, Estonian National Social Insurance Board, Eesti Töötukassa, Estonian Health Insurance Fund and the Labour Inspectorate.

IN THE LIGHT OF THE GLOBAL SUSTAINABLE DEVELOPMENT GOALS, ESTONIA FACES CHALLENGES IN ALL ENVIRONMENTAL AREAS

Kaia Oras

There is still much to do to achieve the environmental goals of global sustainable development: there has been success but also shortcomings. Nevertheless, the prioritisation of the environmental conservation has fostered the growth of the environmental sector, providing jobs for an increasing number of people.

The UN Sustainable Development Goals^a for the next 15 years primarily focus on the achievement of balance between the limited ecological resources of the planet and the wellbeing of people. Similarly to many other UN countries, Estonia also directs its development based on these goals. There are 17 global goals. The targets directly related to the environment are listed in the table. The article gives a brief overview of how successful Estonia has been in protecting marine and terrestrial ecosystems, stopping activities which exacerbate climate change, introducing sustainable and environmentally friendly consumption and production patterns, maintaining water resources and turning energy production environmentally friendly.

UN sustainable development goals^b

Goal	Short name	Full name
Goal 6	Clean water and sanitation	Ensure access to water and sanitation for all
Goal 7	Affordable and clean energy	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 12	Responsible consumption and production	Ensure sustainable consumption and production patterns
Goal 13	Climate action	Take urgent action to combat climate change and its impacts
Goal 14	Life below water	Conserve and sustainably use the oceans, seas and marine resources
Goal 15	Life on land	Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

The loss of terrestrial and marine ecosystems and a decrease in biodiversity (goals 14 and 15) are both a global as well as a local problem. The impact of human activities on ecosystems originates from many interconnected sources, e.g. changes in land utilisation, use of fertilisers and pesticides, overall pollution, but also the spread of alien species (incl. genetically modified organisms) and monocultures, and climate change.

The negative environmental impact, which originates from different sources and affects the terrestrial and marine ecosystems, has decreased in Estonia in the past decades. For instance, limiting the discharge of pollutants into the environment with wastewater effluents has contributed to the reduction of eutrophication^c: compared to the year 2000, phosphorus emissions from point source pollution have decreased by three quarters, nitrogen emissions by nearly a half and the emissions of organic pollutants also by nearly a half. Besides point source pollution, water ecosystems are also influenced by diffuse pollution which may originate from agriculture. The areas engaged in intensive agricultural production have gradually increased (32% compared to 2004) and the use of pesticides per one hectare of agricultural area has also increased (3.5 times compared to 2004).

The strength of Estonia is classical nature conservation: in 2017, nature reserves formed a total of 18.7% of the land territory of Estonia, which is more than in many European countries. Primary undisturbed forests serve as the only habitat for many plant and animal species (e.g. several lichens, mosses and fungi, flying squirrel from among mammals, black stork from among birds, etc.). Due to the extensive use of timber, the forest ecosystems may change or be destroyed, which may result in isolated forest areas with isolated communities with too low abundance. Fragmented natural environment may also damage the species who need a large single habitat. In 2017, the share of protected forest land from total forest land was approximately 26%. In 2017, the area of strictly protected forest land was 0.3 million hectares, i.e. 13% of the total area of forest land. The area of strictly protected forest land has increased 1.3 times in the last 10 years (compared to 2008).

One of the global environmental goals is the sustainable management of water reserves (Goal 6). In Estonia, natural groundwater largely serves as the source of drinking water, whereas only in Tallinn and Narva surface water is used due to the large consumption rates. The use of groundwater has decreased and become more efficient: in 2016, groundwater consumption per capita was 34 cubic metres, i.e. approximately one fifth less than in 2000, when groundwater consumption per capita exceeded 40 cubic metres. Ensuring the availability of clean drinking water is one aspect of the sustainable management of water resources. At global level, the joint management and sharing of the world marine areas also plays an

^a In 2015, the heads of states and government adopted a declaration "Transforming our World: the 2030 Agenda for Sustainable Development" which lists 17 global sustainable development goals, 169 targets and instructions for the implementation thereof.

^b Extract of environmental goals

^c According to Wikipedia, eutrophication (from Greek *eutrophos*, "well-nourished") or hypertrophication is when a body of water becomes overly enriched with minerals and nutrients that induce excessive growth of plants and algae. This process may result in oxygen depletion of the waterbody. One example is the "bloom" or great increase of phytoplankton in a water body as a response to increased levels of nutrients. Eutrophication is almost always induced by the discharge of nitrate or phosphate-containing detergents, fertilizers, or sewage into an aquatic system.

important role. Human activities which may affect the quality of water are wide-ranging and varied. However, the quantity of not cleaned or partially cleaned wastewater directed to waterbodies has decreased in Estonia, as well as the pollution reaching the Baltic Sea via rivers. In 2016, 55% of the surface waterbodies were in at least a good consolidated status. However due to increased environmental requirements, there are no coastal waterbodies in a good or very good status in Estonia as of 2016.

When in the sector of water and ecosystems the achievements prevail over the problems, there are still lot of prevalent problems both on local Estonian as well as on global scale in three fields of activities: non-sustainable production and consumption patterns, energy production which strains the environment and large emissions of global greenhouse gases related to the two previous issues.

Climate processes and changes are both global and local (Goal 13), whilst the decisions leading to possible solutions are implemented at the local level and require changes in production and consumption. In 2015, an international climate change agreement was concluded in the United Nations Climate Change Conference in Paris (COP 21), the objective of which was to keep the climate change under control and ensure that the temperature on Earth would not increase more than 2 °C. The objective of the EU is to reduce greenhouse gas emissions 80% by 2050 (as compared to 1990). Estonia has set an interim goal to reduce greenhouse gas emissions at least 40% by 2030 and also 80% by 2050. By 2016, greenhouse gas emissions had reduced in Estonia by half (51.4%), which could be attributed to a major decline in production activities in the 1990s.

When observing the trends of this century, the absolute value of greenhouse gas emissions had not decreased in Estonia by 2016 as compared to the year 2000, instead, this value had slightly increased (13.4%). Compared to other European countries, the Estonian production industry creates more greenhouse gases: in 2015, three times more greenhouse gas emissions were produced per one euro of GDP than in the European Union on average. Nevertheless, the development of Estonia based on relative indicators is showing a positive trend. In 2015, one third less greenhouse gases were created per one unit of GDP (euro) than in 2000 (1.1 CO₂ and 1.6 CO₂ equivalent kilograms respectively). However, the economy (GDP) has grown somewhat faster and to some extent, the quantities of greenhouse gas emissions have been decoupled from GDP^a. And yet, for one greenhouse gas – methane – the generated quantities have also decreased in absolute terms (nearly 15% compared to the year 2000) in Estonia.

In most countries greenhouse gases largely originate from the energy sector. In Estonia, too, they largely come from the oil shale energy sector. This way, the achievement of these global goals, the combating of the climate change (Goal 13) and the **sustainable energy economy (Goal 7)**, are mutually related.

Energy efficiency and environmental friendliness of energy use are the goals of the energy policy of Estonia. In the long-term perspective, the use of renewable energy would ensure the sustainability of energy in terms of energy independence, affordability as well as environmental friendliness. Since 2006, the share of energy from renewable sources in final energy consumption has continuously increased in Estonia: when in 2006 the share of renewable energy was 16.1%, then by 2016 it had risen to 28.8%. Estonia has already reached the goal set for 2020 in the draft of the Estonian National Development Plan of the Energy Sector, which foresees that the share of renewable energy in final energy consumption should reach 25%. The success of Estonia is shadowed by the fact that the current main renewable energy source is the biomass from the forests: firewood, wood chips and residues. The share of other renewable energy sources, such as hydropower, solar and wind power, which have a smaller environmental impact, is still quite low. In 2016, a total of 4.1 million tonnes of CO₂ emissions were created from producing renewable energy from biomass. However, carbon is bound in the wooden biomass again upon the reforestation of woodlands.

Estonia is currently one of the most energy independent countries in Europe, although the local energy independence is quite conditional, since our energy production largely depends on one source, oil shale. The problem of the affordability of energy in Estonia is much smaller than in many developing countries. Energy expenditure also forms a slowly decreasing share in the total expenditure of households, having dropped to 8.9% in 2017.

Energy efficiency which characterises the energy use of the economy has gradually increased in Estonia by each year (17% by 2016 compared to 2007) – this is due to the decline in the energy-intensive industry, structural changes in the economy, increase in the fuel and raw material prices, the reduction in the export of electricity as well as the economic growth. If the final energy consumption decreased 0.5% by 2016 (compared to 2008), then GDP increased 6.5% during the same period.

Regarding the target for ensuring sustainable consumption and production patterns (Goal 12), the global and local objectives of the year 2030 include the sustainable management and efficient use of natural resources, the recovery and recycling thereof with the purpose to reduce waste generation. Reorganisation of taxation is also essential, so that the polluter pays principle would be applied and wasteful consumption would decrease.

The consumption and production patterns of Estonia are affected by the mining and use of oil shale. The use of oil shale takes Estonia among the worst-ranked countries of EU for our emissions of air pollutants and greenhouse gases, waste (incl. hazardous waste) generation and water consumption. By 2016, the use of oil shale had increased 27% (compared to 2000) and the problems related to the use of oil shale had increased as well. Pressures on the environment have not decreased over time: compared to the year 2000, waste generation has increased by approximately twice as much and the generation of hazardous waste by a half (75% of regular and 83% of hazardous waste are generated from oil shale). If in 2000, 4.0 million tonnes of oil shale mining and enrichment waste, 1.0 million tonnes of oil shale retorting waste and 4.9 million tonnes of oil shale ash were generated, then in 2016, the quantities were 10.8 million, 0.6 million and 8.9 million tonnes, respectively. However, the waste recovery rate has increased from 14% in 2000 to 38% in 2016.

The large amount of input resource and waste is problematic from the point of view of both the economy as well as the environment. On the one hand, we are dealing with resources which can potentially be recovered or recycled, on the other

hand, however, the disposing of such resources into the environment and burning them poses a problem because hazardous compounds could be discharged to air, into soil and groundwater.

The fiscal measures of environment and resource protection are created to reduce the input of resources, the generation of waste and the damage to the environment. Income from environmental taxes has increased for years (from 147 million euros in 2001 to 645 million euros in 2016). The main objective of the implementation of environmental taxes and charges is to change the production and consumption by taxation of the activities polluting the environment and wasting resources in a way that the less polluting activities would get a development advantage and the environmental impact would gradually decrease. Although the share of environmental taxes in GDP has increased (2.1% in 2001 and 3.1% in 2016), the taxed use of the environment and the environmental pressures in many spheres have not decreased.

The development of environmental protection has brought along a growth of the environmental sector, comprising the provision of environmental protection services, production of environmentally friendlier and more resource efficient products and technological innovations as well as the development of completely new environmentally friendly production processes. In 2015, the environmental goods and services sector formed already nearly 6% of the total economy of Estonia and offered jobs for nearly 32,500 people, the volume of which is comparable to the production of the real estate sector, the number of the employed is comparable to the number of employed in the art, entertainment and spare time sector (incl. other related services). In 2015, the production of environmental goods and services amounted to 2.6 billion euros, whereas energy efficient construction, waste management and renewable energy contributed the most to it. The total value of the produced environmental goods was 1.1 billion euros. The main environmental goods included renewable energy and goods related to energy efficiency (mainly the goods used for insulating buildings). In 2015, export formed nearly 15% of the production of environmental goods and services sector. The consumption of environmental goods and services greatly affects the transition to a more energy efficient and environmentally friendly economy with lower CO₂ emissions.

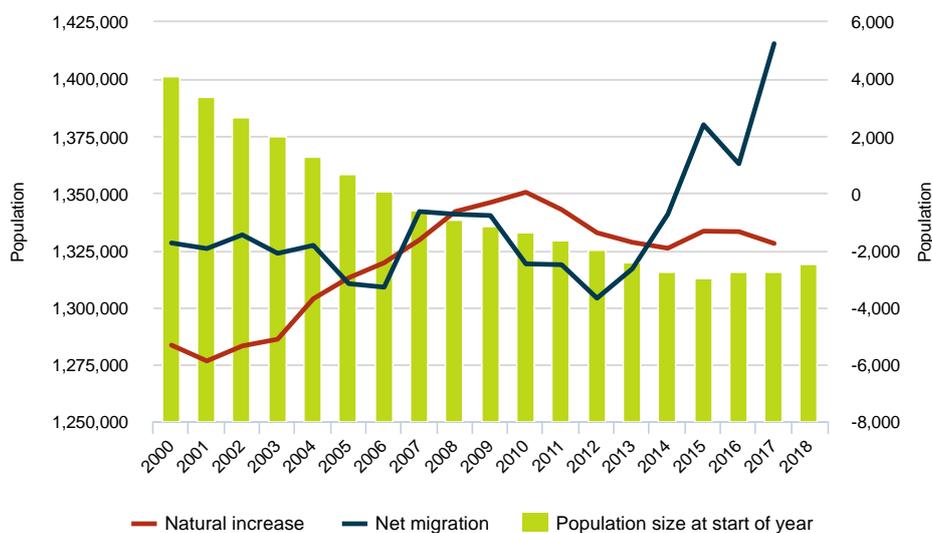
POSITIVE IMMIGRATION IN ESTONIA FOR THE THIRD CONSECUTIVE YEAR

Alis Tammur

Estonian population is on the rise. Net external migration has been positive already for three years, and in two of these years, immigration has compensated for the negative natural increase – also population has increased. At the same time, the number of births has not changed significantly, and the number of children per woman is still substantially lower than the replacement level. Ageing continues to be an important process shaping the population.

Estonian population has increased in recent years – this is the most important change since Estonia regained its independence. In 2000–2015, population declined by 88,000 persons, or 6.5%. This means that there were on average 6,000 fewer people each year. Over the next three years, population grew by 3,000 persons, i.e. by nearly 0.5%. As at 1 January 2018, Estonia's population was 1,319,000 persons, which is more than four years ago.

Change in population size and in events affecting it, 2000–2018



Source: Statistics Estonia

Natural increase (the balance between births and deaths) as well as migration have affected population change. In different periods, the impact of these components has varied in intensity and direction. At the beginning of this century, population decline was affected more by natural increase than by migration – 5,000 to 6,000 fewer people were born than deceased over the course of a year. At the end of the first decade, i.e. by 2010, natural increase was slightly on the plus side. In the following years, natural increase declined and fluctuated in the range of –1,300 to –1,900. The natural increase of Estonians has been quite stable. At the moment, it is negative by only about 100 persons. In 2008–2012, it was positive.

By looking at the components of natural increase separately, it can be seen that the number of deaths has remained stable in the range of 15,000 to 16,000 for eight consecutive years. The number of older persons in the population is growing, but as life expectancy is increasing as well, it is not yet affecting the number of deaths. Life expectancy in Estonia at birth was 77.8 years in 2016. Life expectancy for males was 73.2 years and for females 81.9 years. The difference between the life expectancy of males and females was 8.7 years, which is quite significant compared to other developed countries. The difference has decreased over time: in 2000, the difference between the life expectancy of males and females was 10.5 years. The difference between the births and deaths of males and females varies slightly. More males are born, which is a known fact, but the change in the number of deaths is interesting: since 2009, there are fewer deaths of males than of females. Therefore, the natural increase of males is more stable, being positive in 2009–2011 and in 2016. This can be explained by the large number of older women in the Estonian population, which considerably exceeds the number of older men – 3/4 of those aged 80 or over are women.

The number of births was around 13,000 births a year at the beginning of the century. Thereafter it began to rise and amounted to a little over 16,000 children in 2008. The total fertility rate (average number of children per woman) in 2008 was 1.72. In the following years, the birth rate began to decline, and in 2013, there were 2,500 fewer births. In 2013, the total fertility rate was 1.52. At that time, both indicators were at their lowest in the post-growth period. In 2017, nearly 13,800 children were born – the number of births increased slightly. The increase in the number of births is not substantial, but taking into account that the number of women in fertile age is declining, the birth rate is actually quite stable. In 2017, the total fertility rate was 1.6. Due to postponing childbirth, women are having children at an increasingly older age. While twenty years ago, women in the 20–29 age group mainly gave birth, now it is the 25–34 age group.

The registered net external migration (the difference between immigration and emigration events) in 2000–2003 was stably negative by about 2,000 persons. In the following two years, it declined further and was negative by more than 3,000 persons. Since 2007, net migration started to increase and was negative by fewer than 1,000 persons for three years. In 2010–2012, the number of emigrants increased again. While according to registered events, net migration in the period 2000–2011 was –23,000, according to the population and housing census in 2011, the actual number of emigrants was a lot larger. An additional 19,000 persons are estimated to have emigrated without registering their emigration – as a result, the total net migration for the period of 12 years amounted to –42 000. Since 2013, both registered and unregistered migration are taken into account in population and migration statistics, net migration has increased and has been positive since 2015.

The migratory behaviour of men and women is different. In the period of negative net migration, in overall terms, twice as many women as men left Estonia. Now that the net migration of both sexes is positive, the number of returning females is a third lower than the number of returning males. Participants in external migration are usually in younger working-age, i.e. aged 20–39. Also persons aged 40–59 quite actively change residence across the Estonian border, but their number is about a half smaller. Based on net migration, Estonia gained 2,500 persons aged 20–39 from external migration in 2017 and a thousand fewer persons aged 40–59. The migration of children younger than 5 has been positive by about 300 persons for the past three years, which indicates the arrival of families with children. Approximately a half of these are cases of return migration – net migration of children aged 0–4 with Estonian citizenship is positive by about 150 children.

In order to understand what is happening in migration, it must be studied by citizenship. Estonian citizens play the most important role in Estonia's external migration – they account for a half of immigrants and 2/3 of emigrants. Net external migration of Estonian citizens has so far been negative. It has increased in recent years, but was positive only in 2017, when 500 more Estonian citizens came to Estonia than left. Based on the data for one year, it cannot be said that the trend has changed. Net migration of European Union citizens and persons coming from third countries is positive. Finnish and Latvian citizens from the European Union countries and Ukrainian and Russian citizens from the third countries are the most numerous. This shows that Estonia interacts the most with the neighbouring countries.

It is important to also look at the population change on a smaller scale, as the processes taking place within age groups may differ from the overall trends. All the three vital events affect different age groups – births affect the number of children, deaths affect the number of older people and migration affects the number of working-age people. It has been widely discussed that the Estonian population is ageing. The number of persons aged 65 or over has increased since the restoration of independence, having grown in recent years by 1–2% a year. The increase in the number of older people can be explained by an increasing lifespan and the fact that more numerous age groups have reached pension age. Also the share of older people in population has increased. The share of persons aged 65 and over was 11.4% in 1989, and 11 years later, in 2000, it amounted to 14.9%. Since then, the share of older people has increased by 0.2–0.3% year on year, constituting 19.6% in 2018.

The change in the number and share of children has followed a different trend: in 1989, there were a third more persons aged 0–14 in Estonia than now; in 2018, there were twice as many 0–14-year-olds as those aged 65 or over. Children accounted for 22.3% of the total population in 1989. Since 2004, there are less children than older persons. In fact, since 2009, the number and share of children in the total population has increased, due to an increase in the birth rate at the end of the first decade of the 2000s – in 2008, persons aged 0–14 accounted for 14.8%, but now for 16.2% of the total population. Considering that the number of women in fertile age declines each year, it may be expected that in the near future, the share of children in the population will begin to decline as well.

For those who think about the economy and overall functioning of the state, the age group of working-age persons in between the above-mentioned two age groups and its change is the most important indicator. The size of the 15–64 age group has been declining since 1989. In early 1990s, a large share of the military personnel and employees brought to Estonia during the Soviet Union's occupation left Estonia. The share of the working-age population began to decline from 2007, when the small cohorts born in the 1990s, when the birth rate was low, reached working age. The share of working-age persons in 2006 was 68%, and now, 12 years later, 64%. The number of working-age persons has decreased by 61,000 persons over the past decade. While in 2008, it decreased by only 3,000 persons, in 2012, by nearly 10,000. In 2012–2014, the number of working-age persons declined on average by 9,000 a year, but the decline has slowed down since then, and due to positive immigration in recent years, the decline in the number of working-age persons as an average for three years (2015–2017) has almost halved, decreasing by 4,000 persons a year.

THE SHARE OF OLDER STUDENTS IN VOCATIONAL AND HIGHER EDUCATION IS INCREASING

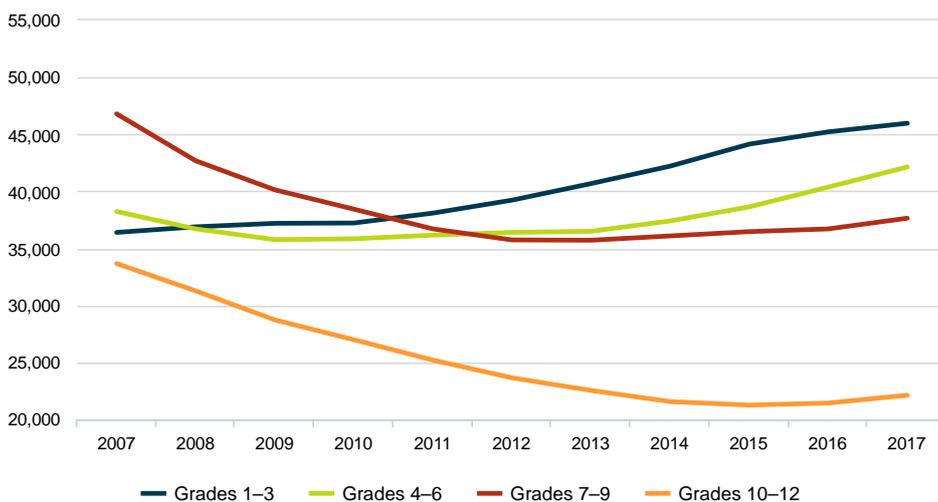
Riina Leinbock

In the academic year 2017/2018, there were 153,300 students acquiring general education, 24,100 vocational education and approximately 46,200 higher education in Estonia. Compared to the previous academic year, the number of students in general education increased by 4,100; in vocational education it decreased by 900 and in higher education by 1,600.

The lowest level of education – pre-primary education – can be obtained in preschool childcare institutions. In the academic year 2017/2018, 66,900 children attended 628 preschool childcare institutions, or approximately 700 fewer than the year before. In 2003–2014, the number of children in preschool childcare institutions was constantly increasing, but since 2015 has decreased. The decline from the previous academic year was the biggest among 5 and 6-year-old children in kindergartens. 88% of all 3–6-year-old children attended a preschool childcare institution.

In the academic year 2017/2018, there were 517 general education schools with full-time tuition – 351 basic schools and 166 secondary schools. The number of basic schools increased by 8 over the last decade, whereas the number of secondary schools decreased by more than 60. Due to the consolidation of the schools network, the average number of students per school has increased in recent years: in 2017/2018, there were on average 360 students in a basic school and 130 students in a secondary school. The number of secondary schools has progressively declined and the number of basic schools has increased in recent years, which has led to that only 32% of all general education schools were secondary schools in the academic year 2017/2018. Before the academic year 2013/2014, this indicator had been close to 40% for years.

Students in full-time general education by school level, 2007–2017^a



^a The year when the academic year begins.

Source: Estonian Education Information System (EHIS)

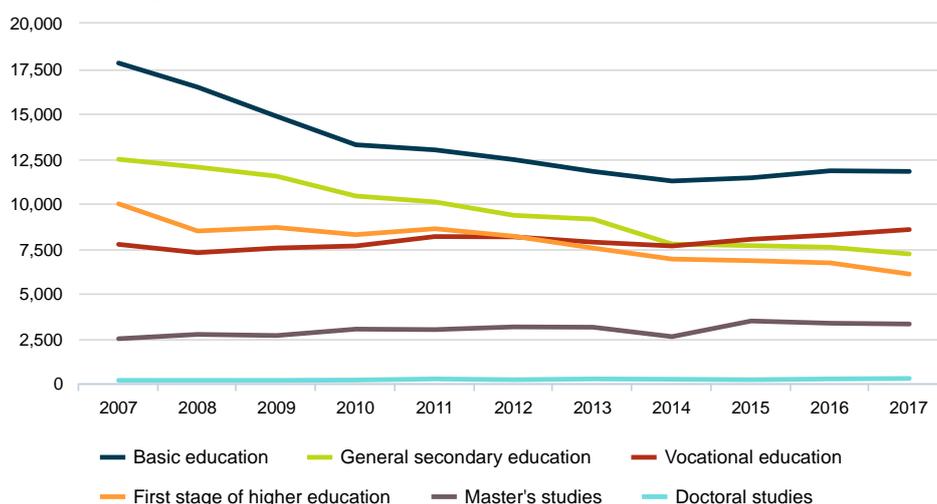
In the academic year 2017/2018, approximately 153,300 students were acquiring general education, 147,800 of them full time and over 5,000 students part time. The number of full-time students increased by 4,100 over the year, the most (4.3%) in grades 4–6. The basic school students totalled 125,700 in the academic year 2017/2018, which is 3.6% more than 10 years ago and nearly 13% more than 5 years ago. The interim decline in the number of students was replaced by an increase again. The number of first-graders has been increasing for some ten years and surpassed the margin of 15,000 in the last three academic years. Over the decade, the distribution of students between stage I (grades 1–3), stage II (grades 4–6) and stage III (grades 7–9) has considerably changed. The number of those studying in stage I and stage II increased, whereas the number of students in stage III decreased rapidly at first, but during the last four years, the rapid decline was replaced by a moderate increase. This rapid decline led to a rapid decrease in the number of those who have acquired basic education, which has stabilised at approximately 11,800 by now. The number of secondary school students had been decreasing since the academic year 2005/2006, but started to increase in 2016/2017 and reached 22,100 by this academic year, which is approximately 670 students more than in the previous year. In 2017, the number of secondary school graduates still decreased. The above changes were due to changes in the population age structure.

24,100 students were acquiring vocational education in the academic year 2017/2018. The total number of students in vocational education has been gradually decreasing for a long time already, notwithstanding some fluctuations. The number of graduates has been increasing during the last three years. This growth has been due to the implementation of new study programmes, which have shorter nominal study periods, and a decline in the number of dropouts from education. The share of students obtaining vocational education after basic education has increased rapidly. In the academic year 2017/2018, 76% of all students in vocational education were acquiring vocational education after basic education and 20% after secondary

education; 4.4% of the students were in vocational education without basic education requirement. In the academic year 2013/2014, when the share of students in vocational education after basic education was the smallest so far, the respective figures were 55%, 43% and 1.4%.

Over the last decade, the share of 25-year-old and older students in vocational education has increased from 15.1% in the academic year 2007/2008 to 36.7% in 2017/2018. There are now nearly 8,900 25-year-old and older students in vocational education^a. At the same time, the share of younger than 19-year-old (incl.) students has dropped from two thirds to 46%. This change indicates the increasing willingness of the adults to learn something new and to improve their competitiveness in the labour market. Male students have been somewhat more numerous in vocational education than female students for some years already. The highest percentage of male students of the last decade (56.6%) was in 2009 and 2010, which has dropped to 52.3% by now.

Graduates by level of education, 2007–2017^b



^b The year when the academic year ends.

Source: Estonian Education Information System (EHIS)

In the academic year 2017/2018, higher education in Estonia was provided by 20 higher education institutions, 6 of them were private schools. The number of higher education institutions was the biggest in 2001 and 2002 (49 educational institutions), and since then has diminished year over year. The decrease in the number of young people is a reason why the number of students has also decreased considerably. In the academic year 2017/2018, approximately 46,200 students were acquiring higher education in Estonia, or by one third fewer than in the peak year of 2010/2011 (over 69,000 students). The rapid decline concerned above all the bachelor's students and students in professional higher education; the number of master's students has been quite stable. The number of graduates has also decreased due to the decline in the number of graduates from bachelor's courses and professional higher education (or first stage of higher education), but changes are slower here. In the academic year 2016/2017, 9,600 students graduated from institutions of higher education, approximately two thirds of them graduated from the first stage of higher education.

As the number of younger students is decreasing much faster than that of older students, the share of older students in higher education has increased over the years. Ten years ago (in the academic year 2007/2008), 63% of the students were younger than 25; by the academic year 2017/2018, their share has fallen to 52%. In the same period, the share of 25–29-year-old students increased from 16% to 21%, and the share of 30-year-old and older students from 21% to 27%. A similar trend is characteristic of the higher school entrants: 10 years ago, 72% of those admitted were younger than 25 years old, whereas in the autumn of 2017, only 62%. In 2017, already one fifth of the entrants were 30 years old and older, including 35% of the entrants to master's programmes (excl. integrated studies). Female students accounted for 59% of all students and 63% of the graduates, according to most recent statistics. The female predominance in higher education has somewhat diminished over the past decade, especially among the graduates. The most popular fields of study were business, administration and law (23%), followed by engineering, production and construction (16%), and humanities and arts (13%). The new admissions demonstrated that the ranking of most popular fields of study was the same.

^a Age data hereinafter are based on <https://www.haridussilm.ee>.

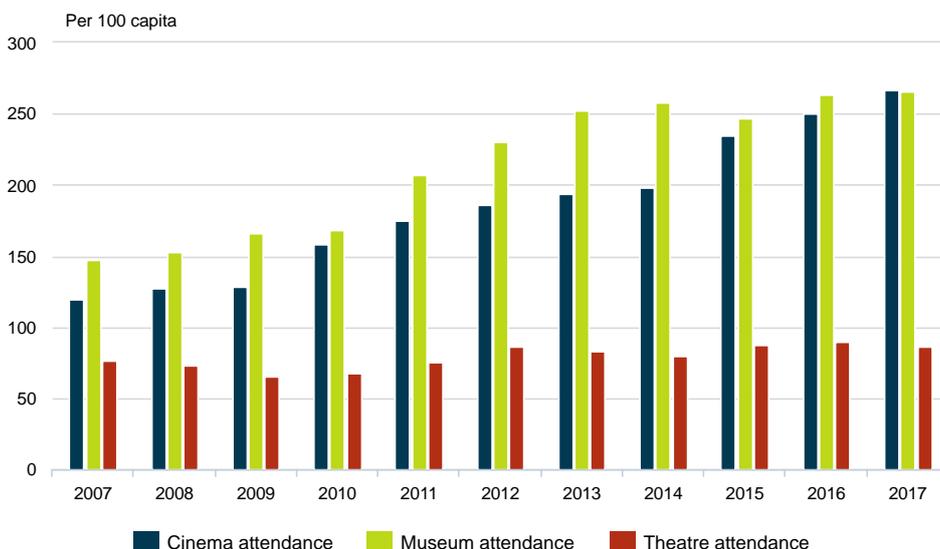
FICTION PUBLICATIONS HIT A RECORD

Riina Leinbock

In 2017, the number of museum visits as well as cinema attendance exceeded 3.5 million for the first time. Theatres were visited slightly more than 1.1 million times. The number of printed fiction titles – 1,173 books – set a new record in 2017. The number of users of public libraries has, after a decline of some ten years, stabilised at 353,500.

The number of museums has tripled since the restoration of independence in Estonia. In 1991, there were 81 museums, including branches or locations, in 2017 – 242. However, the number of museums has decreased over the last couple of years. Simultaneously with the long-term increase in the number of museums, the number of museum visits has also increased and set a record in 2017 with more than 3.5 million visits. Visits by foreign tourists accounted for 35% of all museum visits, according to estimates. The most frequently visited were state-owned museums (66% of the visits), followed by local government-owned (21%) and private museums (9%). State museums (69) are fewer than local government (87) and private museums (79), but their collections are much bigger than the collections of local government and private museums together, containing 62% of all museum objects. Notwithstanding the smaller number of objects, private and local government museums are more active in organising exhibitions. One fifth of all museum exhibitions were organised by private museums, although they had fewer than 3% of the objects. In 2017, museums had 1,853 employees working on the basis of an employment contract. The number of employees has increased much more slowly over the years than the number of visits. For example, the number of employees increased by 24%, whereas the number of visits by 78% over the last 10 years.

Cinema, theatre and museum attendance, 2007–2017



Source: Statistics Estonia

Theatre attendance has been at the same level for several years. In 2017, theatres were visited more than 1.1 million times. According to preliminary data, there were over 865,000 visits to state and town theatres – 1% less than the year before. Drama productions had the biggest audience (60%), followed by music productions (17%).^a Dance, puppet, cross-type and other productions were seen by considerably fewer people. The most popular among drama productions were dramas and among music productions – musicals. From among dance productions, people preferred classical dance to modern dance. Two-thirds of the spectators visited productions for the adults, nearly a quarter visited children productions and the others youth productions^b. The distribution based on the target group was more-or-less the same also 10 years ago.

In 2017, theatres gave a total of more than 6,400 performances (including 3,820 in state and town theatres) and there was a total of 550 productions in their repertoire (including 320 in state and town theatres). Like the number of productions in the repertoire, the number of new productions has also been stable at the level of 200 productions for several years: in 2017, there were 195 new productions (100 of them in state and town theatres). During the last decade, when the theatre statistics cover also private theatres operating without state support, the number of productions in the repertoire as well as the number of performances has increased by approximately a third. Private theatres have contributed the biggest part of this growth – their number has doubled over the last decade. The number of state and town theatres, at the same time, has decreased by one.

^a Data of 2016 have been used in this paragraph.

^b Children productions are productions for children younger than 17 and youth productions those for people aged 17–20.

Cinema attendance has been increasing for the last 12 years in succession and in 2017, surpassed for the first time 3.5 million. The cinema attendance per 100 capita was 267 in 2017 – over 3 times more than in 2005. The average ticket price, at the same time, increased from 4.3 euro to 5.5 euro. The selection of films distributed in Estonian cinemas has been increasing year after year, especially rapidly is increasing the number of films produced in Europe. The number of films produced in the United States is decreasing, although they are more popular among the audience. In 2017, the cinema visitors could choose between 355 different films, 28 (8%) of them were Estonian films, half were produced in European countries (excluding Estonia), nearly one-third in the United States and 10% in other countries.

The number of films produced in Estonia varies from year to year. 22 full-length films were produced in 2017, for five of them Estonia was a minor co-producer. Full-length film here means a film of a duration of at least 60 minutes. Half of the full-length films were feature films and the others were documentaries; 13 of them were distributed in Estonian cinemas in 2017. In the category of short films or films of a duration of less than 60 minutes, 30 feature films, 70 documentaries and 7 animations were produced. Additionally, numerous short films of other type – advertising, promotional and educational films, music videos etc., were produced. In addition to the production of films, Estonian firms provide various film services to foreign companies. In 2017, such services were provided for 3.6 million euros, the year before for 2.1 million euros. Advertising films accounted for the biggest share of the cost of services.

In 2017, 3,161 printed book titles were published in Estonia, 1,173 of them were fiction. Pamphlets, or 5–48 pages long non-periodical printed publications, were released 755 titles, approximately 200 of them fiction and 150 in plastic and graphic arts and photography. The number of published book titles increased continuously until 2008 (3,710 titles) and has fluctuated from year to year since then. The number of fiction book titles has been increasing in recent years and set a record in 2017. On the other hand, the total print run of books has decreased in recent years: 3,014,000 copies were printed in 2017, including 990,000 copies of fiction. If to look at books and pamphlets together, 82.4% of all the publication titles in 2017 were in Estonian and 44.3% were originals in Estonian. The number of children book titles was 784, which is close to the peak level of 2014. There are increasingly more magazines in Estonia. In 2017, there were 340 magazines, 292 of them in Estonian. At the same time, the number of newspapers has dropped after the peak of 2008 (155 newspapers). 109 newspapers were published in 2017, 74 of them in Estonian.

The number of public libraries in Estonia has declined continuously since the beginning of the 1990s. In 2017, there were 532 public libraries in Estonia, in the early 1990s by 100 more. The number of users, which in the early 2000s was around 440,000–450,000, started to decrease rapidly after 2005. In 2017, the public libraries had 353,500 users, which was still 0.6% more than the lowest level a year before. The average number of items borrowed by a user has varied over the years. It was the highest at the end of the 1990s when a user borrowed on average 36 books or other items. In a couple of last years, the average number of items lent per user has been 29. The number of employees in public libraries has decreased by 15% over the last decade, which is twice as big as the decline in the number of users in the same period. 1,434 people were employed by public libraries in 2017.

The number of users of school libraries, like that of public libraries, has been decreasing for years as well; this has been due to the declining number of students. In the academic year 2016/2017, school libraries had 160,000 users, every user borrowed on average 15 items. The number of users of specialised and scientific libraries has been increasing and reached 231,200 users in 2017. Although the number of items lent per user is smaller in specialised and scientific libraries, these libraries use increasingly more information available in computer networks (databases, newspapers, e-books etc.).

EMPLOYMENT RATE AT RECORD HIGH IN 2017

Ülle Vannas

In 2017, the unemployment rate was 5.8%, the employment rate 67.5% and the labour force participation rate 71.6%. The labour force participation rate increased by 1.2 percentage points and the employment rate by 1.9 percentage points. The unemployment rate decreased by 1 percentage point. Employment and labour force participation remained high throughout 2017, reaching the highest levels in 20 years. The number of inactive persons continued to decline.

Important indicators in assessing the situation in the labour market are the unemployment rate, employment rate and labour force participation rate. These indicators improved throughout the most of 2017, and, in quarterly comparison, were mostly more positive than the respective indicators for the previous year. Unemployment rate in Estonia has shown a downward trend since 2010, when as much as 16.7% of the labour force was unemployed and was actively seeking work. In 2016, the unemployment rate stood at 6.8%, and in 2017, at 5.8%. The indicator for Estonia in 2017 was 1.8 percentage points lower than the European Union average (EU-28). The lowest unemployment rate was registered in the Czech Republic (2.9%) and the highest in Greece (21.5%; difference with Estonia 15.7 percentage points).

The estimated number of unemployed persons was 40,300, of which almost every third had been seeking work for more than 12 months. In a year, the number of unemployed persons decreased by 6,400, including the number of long-term unemployed, which decreased by 1,300. A person who has been unemployed for a long time is at greater risk of poverty. The long-term unemployment rate for men exceeded that for women (respectively 2.2% and 1.6% of the labour force). In addition to the decrease in the number of persons seeking work, there were also fewer of those in 2017 who had lost hope of finding a job. In 2017, the unemployment rate for Estonians was 4.4% and for non-Estonians 8.8%.

In each quarter of 2017, there were more than 10,500 job vacancies – the last time there were that many job vacancies was during the economic boom. The vacancies, however, tend to be located inconveniently for the job seeker, and the lack of required skills is also an obstacle to getting a job. The unemployment rate for working-age persons with low education level (with basic education or below) was 10.9%, while the unemployment rate among persons with third-level education was only 3.2%. It is important for the prosperity of the labour market that persons attain at least secondary education. In 2017, the share of young people aged 18–24 with low education level and not continuing their studies was 10.8%, and therefore, the target of the Europe 2020 strategy to reduce the share of such young people to 9.5% was not yet reached.

The employment rate (the share of the employed in the working-age population) increased in a year by 1.9 percentage points and was 67.5% in 2017, which is the highest level in 20 years. The number of persons employed increased by 14,000 and is estimated to have reached 658,600. The number of persons employed has increased due to a fall in unemployment as well as an increase in the number of previously inactive persons entering the labour market. Differences in employment by sex, ethnic nationality and place of residence still exist. In 2017, compared to 2016, the employment rate for both men and women increased, but the rate for men was 8 percentage points higher (respectively 71.6% and 63.6%). While ethnic nationality had little impact on the employment rate for men, the employment rate for non-Estonian women was more than 10 percentage points lower than that for Estonian women. Compared to 2010, when the labour market was going through a crisis, the employment rate for non-Estonian women aged 50–74 has improved the least – in 2017, it was only 46.8% (0.8 percentage point increase). In 2017, by county, the employment rate for working-age population was the highest in Harju county (74.2%) and the lowest in Ida-Viru county (53.9%).

In the European Union, as regards employment, the performance of persons aged 20–64 is monitored first and foremost. In 2017, the labour force participation rate in Estonia for persons aged 20–64 was 78.7%. In 2015, a target of the Europe 2020 strategy, according to which the aim of Estonia was 76%, was reached. In this age group, labour force participation has been constantly increasing since 2010, when the indicator was 12 percentage points lower. In 2017, in European comparison, the only countries with higher rates for this age group were Sweden (81.8%) and Germany (79.2%). The average labour force participation rate in EU-28 was 72.2%; labour force participation rate was the lowest in Greece – 57.8%.

The share of employees working full-time in their main job in all employed persons has remained within 89–90% in recent years (89.2% in 2017). The number of persons working full-time increased by 14,800 in a year. The number of part-time employees decreased by 800. There were 3,800 fewer persons who were not satisfied with part-time work and would have liked to work more than they did (underemployed). The share of the underemployed was the lowest in ten years (0.7% of all employed persons).

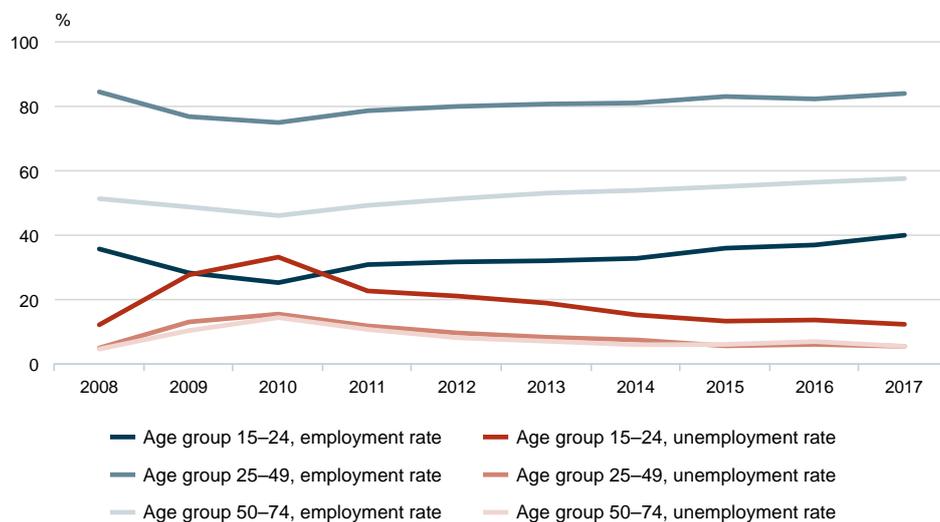
The labour force participation rate indicates the share of the working-age population active in the labour market, i.e. how many are employed and how many are unemployed but are currently seeking work. This indicator is also showing an upward trend in Estonia due to an increase in employment. In 2017, the labour force participation rate was 71.6%, which, similarly to the employment rate, was the highest in 20 years. In a year, the indicator increased by 1.2 percentage points. The annual average number of persons active in the labour market increased by 7,000 and is estimated to have reached 699,000. In 2017, among EU-28 countries, the working-age population was more active only in Sweden (72.7%); the average for EU-28 was 64.7%, and the indicator was the lowest in Italy (57.1%).

In addition to the employed and unemployed, there are always persons who do not want to or cannot work. In the context of the labour market, they are considered inactive. The annual average number of inactive persons stood at 277,000, which is 13,500 fewer than in 2016. According to the international methodology, the labour force surveys conducted in Europe do not

include those on parental leave, even if their official employment relationship has not ended. The number of persons on pregnancy, maternity or parental leave was 25,600. The number of inactive persons decreased the most due to those who were inactive due to ongoing studies (down by 5,600), pregnancy, maternity or parental leave (down by 2,900) or those who considered retirement age to be the main reason for their inactivity (down by 2,700). There were on average 1,000 fewer persons inactive due to illness or injury than in 2016.

In conclusion, the Estonian labour market was in good shape according to the main indicators, both in comparison with previous years and the rest of Europe. The labour force data of 2017 do not indicate a new crisis just yet.

Employment rate and unemployment rate by age group, 2008–2017



Source: Statistics Estonia

In the article, data of the Estonian Labour Force Survey, available in the statistical database, have been used. For the comparison of countries, Eurostat data – also available to everyone – from labour force surveys conducted on the basis of a harmonised methodology in the EU countries have been used. In the context of these surveys, working-age population are persons aged 15–74.

HIGHEST AVERAGE MONTHLY GROSS WAGES IN INFORMATION AND COMMUNICATION

Jaani Ömbli

2017 was a good year for employees. The average monthly gross wages and salaries increased by 6.5% year on year to 1,221 euros, having amounted to 1,146 euros a year earlier. On average, an employee received an additional 75 euros per month in 2017. A year earlier, the average monthly gross wages and salaries increased by 7.6%, denoting an increase in average wages from 1,065 euros to 1,146 euros – a nominal increase of 81 euros per month.

The annual average monthly gross wages and salaries have been steadily rising since 2009, when it amounted to 784 euros. In 2009–2017, the nominal and percentage growth rates were the highest in 2016. During this period, the annual relative increase in average monthly gross wages and salaries was in the range of 1.1–7.6%. Therefore, the growth in average monthly gross wages and salaries in 2017 does not mean that the rate at which the Estonian economy is growing is slowing down or that the wages and salaries are stabilising.

In 2017, of economic activities, the average monthly gross wages and salaries were the highest in information and communication – 2,094 euros, followed by financial and insurance activities with 1,996 euros and electricity, gas, steam and air conditioning supply with 1,742 euros. The lowest average monthly gross wages and salaries in 2017 were recorded in accommodation and food service activities – 812 euros, followed by art, entertainment and recreation with 931 euros and real estate activities with 994 euros.

The growth rate of average monthly gross wages and salaries was the fastest compared to 2016 in mining and quarrying (11.1%), followed by information and communication (10.2%) and electricity, gas, steam and air conditioning supply (9.1%). The smallest year-on-year increase in the average monthly gross wages and salaries occurred in agriculture, forestry and fishing (0.4%), followed by human health and social work activities (3.1%) and arts, entertainment and recreation (3.3%).

There are no changes in the top three of the ranking of economic activities by average monthly gross wages and salaries in 2016 and 2017. The first place was held by information and communication, followed by financial and insurance activities and electricity, gas, steam and air conditioning supply.

Mining and quarrying and public administration and defence; compulsory social security, however, swapped places in 2017 compared to the previous year. This was because the growth rate of average gross wages and salaries in mining and quarrying was 11.1% compared to the 8.8% growth in public administration and defence; compulsory social security.

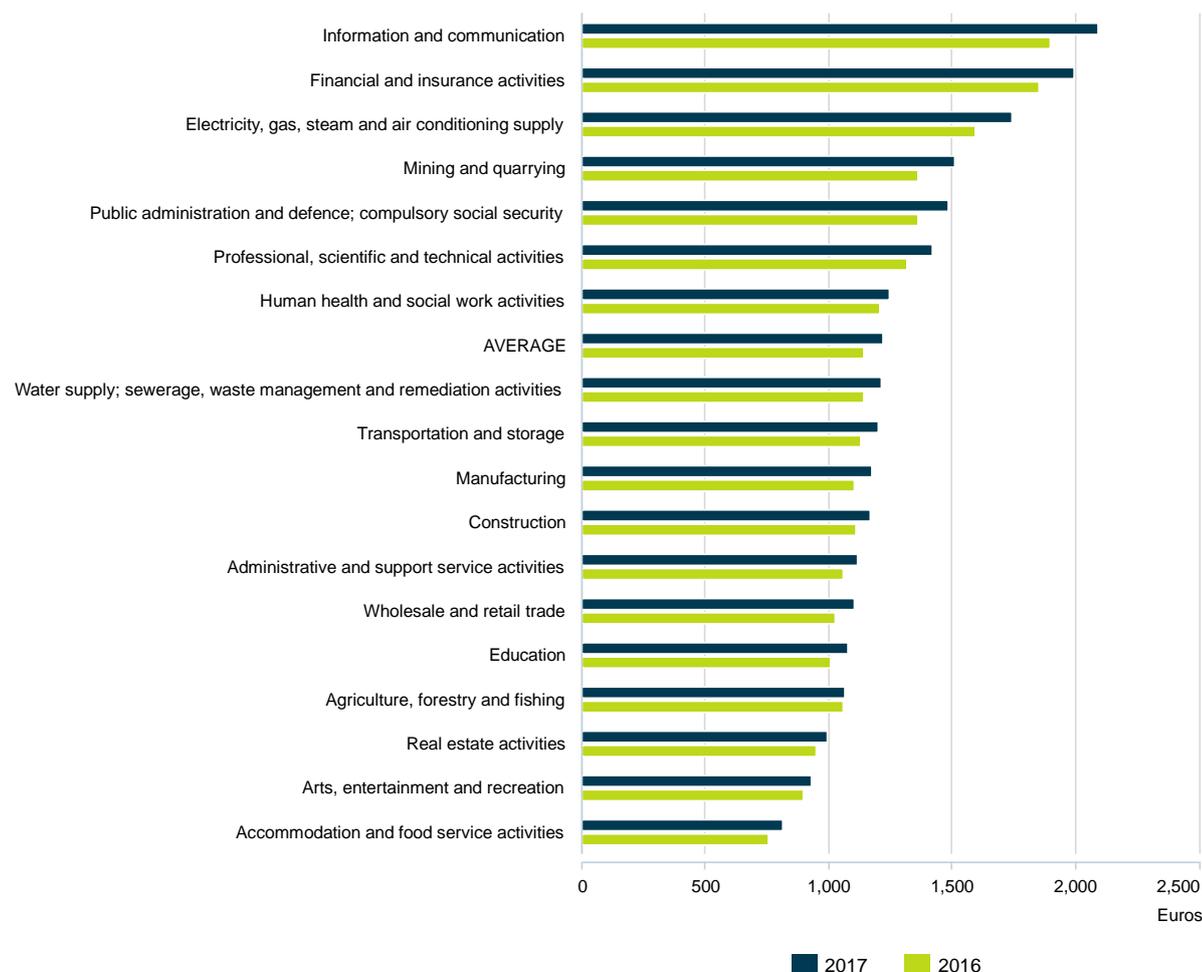
Construction and manufacturing also swapped places. While in 2016, construction was in the lead, in 2017, however, higher average monthly gross wages and salaries were recorded in manufacturing. The rate of growth in average gross wages and salaries in manufacturing was 6%, compared to 5.1% in construction.

In annual comparison, agriculture, forestry and fishing dropped by three spots. In this economic activity, the growth rate of average monthly gross wages and salaries in 2016–2017 was 0.4%. This means that in this sector, wage growth came to a standstill, and is also the reason why this economic activity is slowly falling behind others in terms of average wages. In 2016, the sector ranked 12th, but in 2017, it already ranked 15th. Currently there is no crisis, boom or fast growth in agriculture, and this is reflected in wages and salaries.

Administrative and support service activities have moved up a place, as agriculture has dropped. The growth rate of average monthly gross wages and salaries in administrative and support service activities was 5.8%. Wholesale and retail trade (7.5% growth) and education (7.4% growth) have also moved up a place.

Based on the sector in which the average monthly gross wages are increasing and the growth rate, it is possible to give an assessment about the economic situation and changes in its structure. A fast increase in wages may, for instance, indicate a boom in the sector, an insufficient number of employees needed for meeting the demand, which leads to an increase in the wage level and overheating of the economy.

Average monthly gross wages and salaries, 2016, 2017



Source: Statistics Estonia

An emerging new sector lacking labour force with required skills may also be the reason behind rapid increase in wages. This would not bring about an overheating of the economy or a boom, but would still cause rapid changes. Or it may be a completely static sector from where the labour force is flowing to Finland – the remaining few will need to be paid higher wages to keep some of them in Estonia. Therefore, certain regression may also bring about an increase in wages. In any case, the growth in average monthly gross wages and salaries is an indicator which may provide important information when placed in the context of real economy.

In 2017, by county, the average gross wages and salaries were the highest in Harju county – 1,383 euros, followed by Tartu (1,215 euros) and Viljandi counties (1,055 euros). The average monthly gross wages and salaries were the lowest in Saare county (876 euros), followed by Hiiu (883 euros) and Põlva counties (906 euros).

The rate of growth in the average monthly gross wages and salaries in comparison with 2016 was the fastest in Rapla county (11.4%), followed by Ida-Viru (10.4%) and Võru counties (10.2%). The growth was the slowest in Hiiu county (down by 1.6%), followed by Lääne county (down by 1.5%) and Saare county (down by 0.5%). In these three counties, the average monthly gross wages and salaries decreased compared to the preceding year.

According to the ranking of counties, the leader in terms of average monthly gross wages and salaries both in 2016 and 2017 was Harju county. Tartu county has remained second, but the holder of the third place in 2017 was Viljandi county instead Lääne county. The fourth is Rapla county, which moved up three places compared to 2016, as the rate of growth in average monthly gross wages and salaries was the fastest in this county. Hiiu county, on the other hand, moved down the most – by three places, ending up second lowest ahead of Saare county in 2017.

Regionally, Rapla and Ida-Viru counties are doing increasingly better, and clear progress is also visible in Võru county. Serious problems are experienced on islands but also in Põlva, Jõgeva and Valga counties. As the overall price level in Estonia is largely homogeneous and is rising fast, lower wages cause people to move from one county to another, if not leave Estonia altogether. Therefore, by observing the dynamics of average monthly gross wages and salaries, it is not possible to predict what lies ahead for the Estonian economy or what will happen to the regional economic balance in five or ten years. Wages statistics, however, do provide clues about where the next issues in the Estonian economy lie. In conclusion, wages statistics point to uncertain circumstances: it is clear that there will be changes, but we do not know what these changes will be like.

PRICES INCREASED LAST YEAR

Eveli Šokman

In 2017, the biggest increase among price indices occurred in the export price index and dwelling price index – both increased by 5.5% compared to the average of 2016. In 2017, the biggest increase occurred in the prices of houses (5.8%). The prices of apartments increased by 5.4%.

In 2017, the construction price index increased by 1.5% compared to the average of 2016, including an increase in the cost of labour (2.4%), in the cost of using building machines (1.4%) as well as in the prices of building materials (1.0%). The repair and reconstruction work price index increased by 1.5%.

The producer price index of industrial output rose by 3.6% in 2017 compared to the previous year. Prices increased in manufacturing (4.0%) and water supply (0.2%). A price rise of 5.5% was registered in the manufacture of food products, which is one of the major industries in Estonia. The price decrease was most significant in mining and quarrying (1.1%) and in energy and heat supply (0.2%).

The import price index rose by 4.5% compared to 2016, whereas the prices of refined petroleum products rose by 21.9%. The change in the export price index was 5.5% compared to the average of 2016.

The consumer price index rose 3.4% in 2017 compared to the average of 2016. This was affected the most by a 5.7% price rise of food and non-alcoholic beverages. The biggest contributor was the 10.4% increase in the price of milk, milk products and eggs. Motor fuel, and alcoholic beverages and tobacco both contributed one fifth of the total rise, whereas the prices of alcoholic beverages increased by 8.4% and the prices of tobacco products by 9.5%. Petrol was 12.8% and diesel 14.7% more expensive. Of food products, the prices of butter (33%), low-fat milk (19.9%) and potatoes (15.7%) increased the most in 2017 compared to the average of the previous year.

Compared to the average of 2012, there was an increase in 2017 in the dwelling price index (48.6%), construction price index (7.1%), repair and reconstruction work price index (7.4%), consumer price index (5.8%) and producer price index of industrial output (3.3%). The import price index and export price index fell during the reference period (by 5.5% and 2.9%, respectively).

Based on the harmonised index of consumer prices, the average price change in the 28 Member States of the European Union (EU) was 1.7% in 2017. The price increase was the most substantial in Estonia (3.7%) and in Lithuania (3.7%), followed by Latvia (2.9%) and the United Kingdom (2.7%). The price index rose in all Member States, including the least in Ireland (0.3%).

In 2017, food prices rose on average 2.2% in the EU. Food prices increased the most in Latvia (6.0%), Estonia (5.9%) and in the Czech Republic (5.6%). In 2017, food became cheaper in Ireland (2.0%), Finland (1.3%) and Cyprus (0.1%). The prices of edible oil (8.1%), fish and fish products (3.6%) and fruit (3.2%) increased more than average. The prices of coffee, tea and cocoa increased the most in Greece (12.2%), Sweden (9.7%) and in Finland (7.7%).

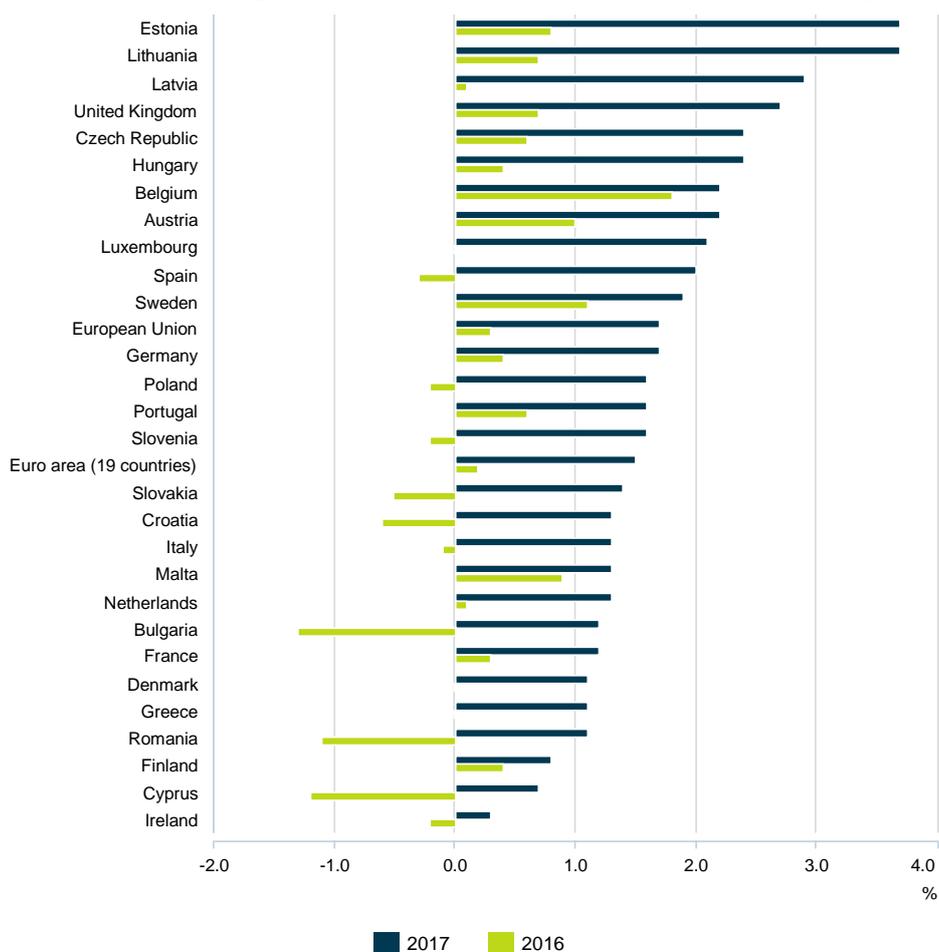
The prices of alcoholic beverages rose in EU countries on average by 0.9%. In 2017, the prices of alcoholic beverages rose the most in Lithuania (12.4%) and Estonia (8.4%) and decreased the most in Ireland (4.4%). The prices of tobacco products increased in EU countries on average by 3.5%, the most in Estonia (9.5%) and Finland (9.3%).

The prices of electricity, gas, heat energy and other fuels combined increased on average 2.8% in the EU year on year. The biggest price rise was in Cyprus (13.6%) and Belgium (9.5%) and the biggest fall in Slovakia (4.3%) and Croatia (4.0%). The prices of electricity rose 2.7% in the EU in 2017 compared to 2016. Electricity prices in Estonia rose 0.7% year on year.

The prices of motor fuels increased in most EU countries in 2017 compared to 2016. The average price rise in 2017 compared to 2016 was 7.0%. The biggest rise in motor fuel price was registered in Estonia (13.3%), Belgium (10.6%) and Greece (8.9%). The price fell only in Romania (1.2%).

Since 2011, the official currency in Estonia has been the euro and Estonia is included in the euro area Monetary Union index of consumer prices (MUICP) calculations. The change in the index in 2017 compared to 2016 was 1.5%. The year prior, it was 0.2%.

Annual average change in Harmonized Indices of Consumer Prices (HICPs), 2016 and 2017



Source: Statistics Estonia

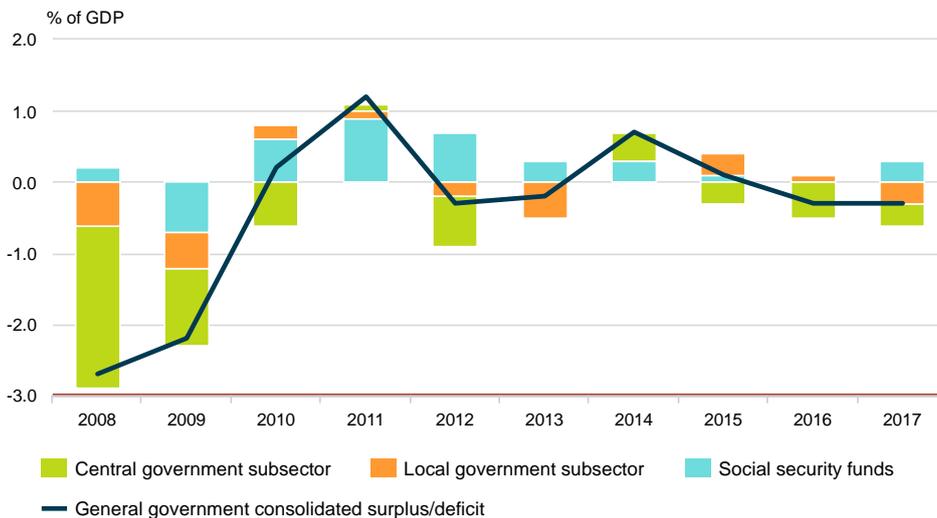
ESTONIA HAS THE LOWEST DEBT LEVEL IN THE EUROPEAN UNION

Agnes Naarits

The year 2017 was eventful for Estonia: the Estonian Presidency of the Council of the European Union and the planning of the centenary celebrations required more state resources than usual. This is reflected also in the finance statistics for the previous year: the revenue as well as the expenditure increased, but the consolidated budget of the general government ended up in slight minus by the year-end. Estonia's financial status, however, remains strong, and the government debt is decreasing year by year. Estonia is incontestably the first among the European Union countries with its lowest debt level.

According to preliminary data, the Estonian general government consolidated deficit in 2017 was 66.1 million euros, or 0.3% of the gross domestic product (GDP). Compared to 2016, the deficit of the whole sector grew by 4.9 million euros. The results of subsectors varied: the revenue deficit of the central government subsector decreased by 30 million euros year on year, amounting to 67.4 million euros at the end of 2017. The consolidated budget of the local government subsector had a deficit of 57.6 million euros, having fallen by 85 million euros year on year. Social security funds were the only subsector on the plus side, with revenues exceeding the expenditures by 59 million euros. It should be noted that according to the EU Stability and Growth Pact, or the Maastricht Treaty, the general government budget deficit of an EU Member State cannot exceed 3% of the GDP.

General government surplus/deficit by subsector, 2008–2017

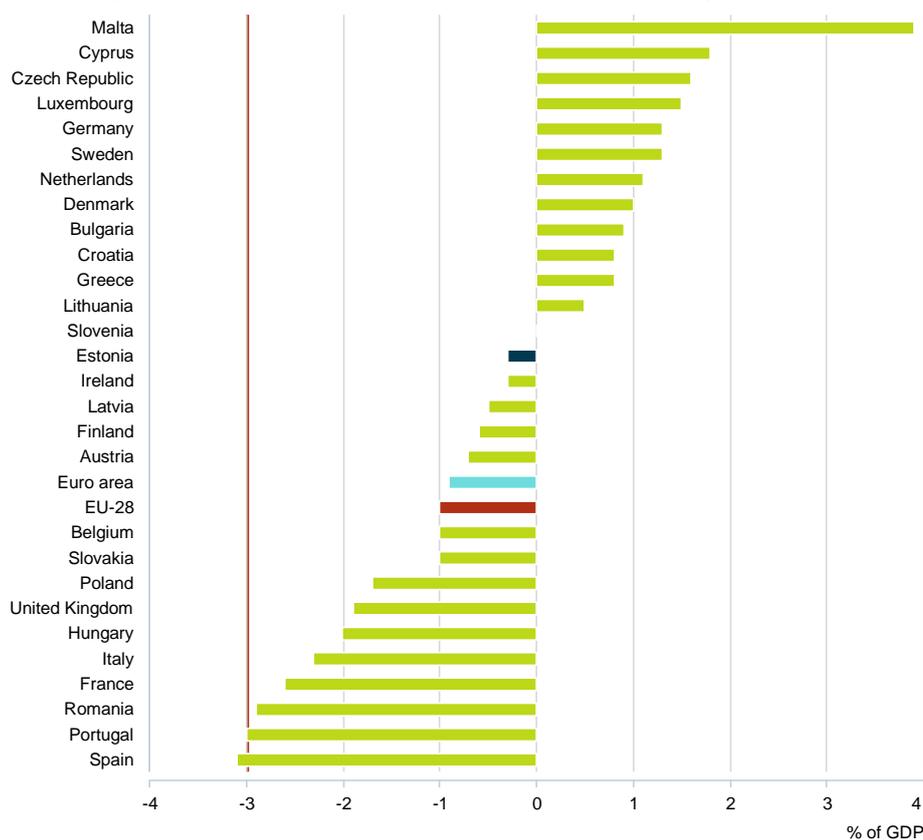


Source: Statistics Estonia

In 2017, the consolidated general government deficit and debt of both the euro area and the EU decreased. In the euro area, the deficit fell from 1.5% in 2016 to 0.9% of the GDP in 2017 and in EU-28 from 1.6% to 1.0% of the GDP.

Fiscal indicators of the Member States are improving year by year. While in 2016, ten EU Member States had a budget surplus and two recorded budget balance, in 2017, surplus was registered already in 12 Member States. Malta ended the fiscal year in the best position (3.9%), followed by Cyprus (1.8%), the Czech Republic (1.6%), Luxembourg (1.5%), Sweden and Germany (both 1.3%), the Netherlands (1.1%), Bulgaria (0.9%), Greece and Croatia (both 0.8%), and Lithuania (0.5%). As at the end of the year, the budget was balanced in Slovenia (0%). The countries with the smallest budget deficit were Ireland and Estonia (both -0.3%), Latvia (-0.5%) and Finland (-0.6%). Two Member States (4 in 2016) finished the financial year with a deficit exceeding the limit agreed in the EU (-3% of the GDP): Spain (-3.1%) and Portugal (-3.0%).

General government consolidated surplus/deficit in the European Union, 2017



Source: Eurostat

At the end of 2017, the consolidated debt of the general government in Estonia (the Maastricht debt, which cannot exceed 60% of the GDP) amounted to a little over 2 billion euros, accounting for 9% of the GDP. The debt level increased by 4% year on year both in the central government and the local government subsectors. Social security funds did not finance their operations with loans and therefore did not contribute to the general government debt.

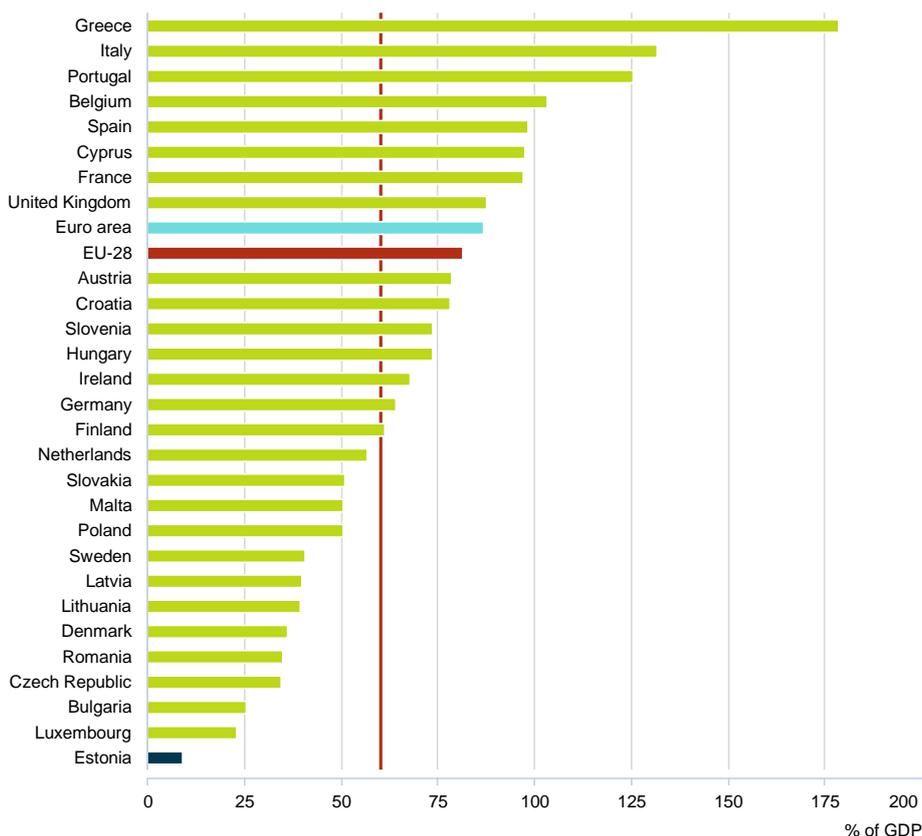
The debt of the central government totalled 2.3 billion euros at the end of 2017, of which 898 million euros were liabilities to other subsectors due to funds held at the Treasury. The share of foreign debt in the central government's loan liabilities was 49%. The volume of long-term securities issued by public legal institutions, foundations and enterprises belonging to the central government was 98.6 million euros at the end of 2017, having increased by 83% year on year. Behind the large increase is a state company that included pension fund money through the issue of 10-year securities for the financing of development projects.

In addition to an exceptionally low debt level, Estonia differs from other countries also in terms of debt instrument distribution. While in the EU as a whole, 81% of the debt are securities, 14% loan commitments and 4% cash and deposits, the debt of Estonia's general government sector consists mainly of loans. The share of issued securities in the sector's debt is modest (11%). The only EU country with a similar share of securities is Greece (17%), whose debt was restructured in 2012 by way of various international aid packages. In preceding years, securities accounted for over three quarters of Greece's debt.

The overall debt of the local government subsector increased by 7% compared to 2016, and stood at 0.8 billion euros at the end of 2017. Loan liabilities to foreign creditors accounted for 22% of the debt of local governments. The volume of long-term securities decreased by 1% year on year and loan liabilities increased by 9%.

The general government debt decreased in the euro area from 89% to 86.7% of the GDP and in EU-28 from 83.3% to 81.6%. There were no changes over the year in the ranking of countries with the lowest debt levels. As at the end of 2017, the lowest general government debt levels were recorded in Estonia (9.0% of the GDP), Luxembourg (23.0%), Bulgaria (25.4%), the Czech Republic (34.6%), Romania (35.0%) and Denmark (36.4%). The number of countries with a higher general government debt level than permitted in the EU (60% of the GDP) again decreased by one; in total, 15 Member States had a debt higher than allowed. The greatest debt burdens were in Greece (178.6%), Italy (131.8%), Portugal (125.7%) and Belgium (103.1%), but all of them were able to slightly reduce their debt burden during the year.

General government debt level in the European Union, 2017



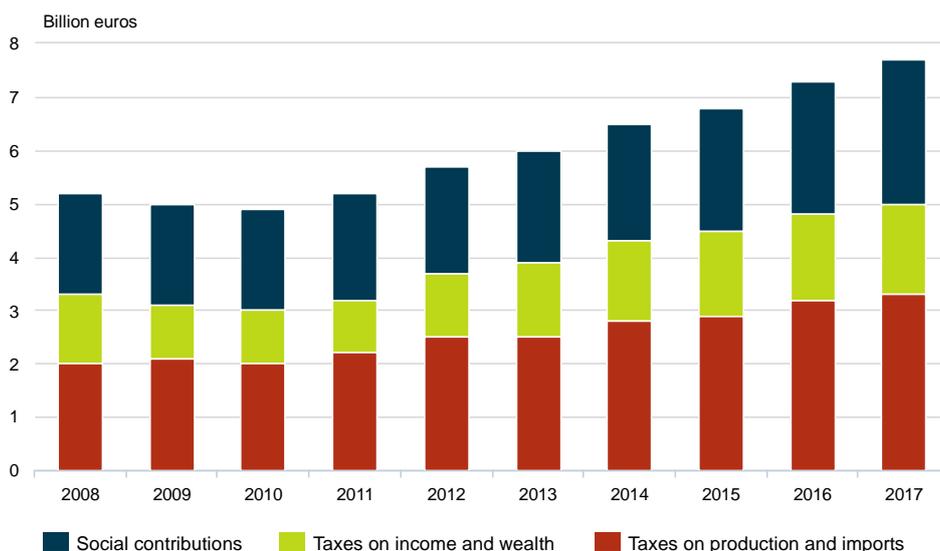
Source: Eurostat

In 2017, the general government consolidated budget continued to increase: both the total revenue and expenditure rose by 7.9%, exceeding the 9 billion euro threshold for the first time. The tax revenue was 7.6 billion euros. Interest and other property revenues, which showed a downward trend in the previous two years, increased by nearly a third. At the same time, interest expenditure continued to decrease. Social benefits paid out increased by 7.2% year on year. The labour costs of the general government increased by 7.1% year on year.

The total accrual revenue from taxes and social contributions received by the general government increased by 6.4% in 2017 compared to the previous year. The sum of social security contributions increased by 8.7% year on year and accounted for a third of the tax revenue. Contributions to pensions, health insurance and unemployment insurance collected totalled 2.7 billion euros.

The growth in receipts from taxes on production and imports slowed down slightly. In total, 3.4 billion euros in value added tax, excise duties and other smaller taxes were received, which is 5.5% more than the year before. Receipts from the tax with the biggest share among these taxes – the value added tax – increased by 8.8%. Tax receipts from the tax having the second largest share – excise duties – decreased, however, by 0.7%, and as much as 12.8% less alcohol excise duty was paid to the State Treasury than the year before. The receipts of income tax amounted to 1.7 billion euros, receipts of the personal income tax grew by 6.8%, but 1% less corporate income tax was received than the year before.

General government tax revenues, 2008–2017



Source: Statistics Estonia

In 2017, the growth of consumption taxes continued (up by 5.7%) but labour taxes increased more (up by 8.8%). The change in capital taxes was close to nil. Estonian tax burden decreased slightly: it was 33.6% of the GDP in 2017, 34.5% in 2016 and 33.7% in 2015.

Government Finance Statistics record the economic activities of all units included in the general government sector in the following sets of data:

- government total revenue;
- government total expenditure;
- government balance, i.e. surplus (+)/deficit (-), referred to in national accounts terminology as net lending (+)/ net borrowing (-);
- transactions in financial assets and liabilities;
- other changes in assets and liabilities (other changes in volume and revaluation);
- balance sheets.

The presentation of government finance statistics is similar to that of business accounting where the profit/loss accounts and the balance sheet are integrated. However, as the emphasis in finance statistics is on the economic substance over the legal form, the indicators of government finance statistics sometimes differ noticeably from the state budgetary or public accounting reporting.

General government finance statistics are compiled in accordance with the methodology of the European System of Accounts (ESA2010), based on which, the general government sector in Estonia is divided into three subsectors:

- the central government subsector, which includes state budgetary units and extra-budgetary funds, foundations, public-legal institutions and also non-market producer enterprises founded by the government;
- the local government subsector, which includes city and rural municipality administrations with their subsidiary units and foundations and the foundations and non-market producer enterprises founded by local governments;
- the social security funds subsector, which includes the Estonian Health Insurance Fund and Eesti Töötukassa (Estonian Unemployment Insurance Fund).

FINANCIAL STATISTICS OF ENTERPRISES IMPROVED IN 2016

Märt Leesment

After a few years of stagnation, 2016 can be considered rather successful for enterprises – the turnover, investments as well as the number of active enterprises increased by 4%. The improved results were reflected also in profits – the profit for the reporting year increased by 11%. Productivity indicators improved also.

The number of active enterprises continued to grow, reaching nearly 81,900, which is 4% more than in 2015. 91% of active enterprises were micro-enterprises, i.e. with less than 10 persons employed. The growth in the number of micro-enterprises was also the most significant. The number of enterprises with 50 and more persons employed decreased. The largest number of enterprises – 20% – operated in trade, 15% in professional, scientific and technical activities and 12% in construction. The largest share of new enterprises were construction enterprises.

The turnover of enterprises increased in 2016 by 4%, reaching 55 billion euros. Turnover increased the most in human health and social work activities and in water supply; sewerage, waste management and remediation activities (both 15%). Turnover decreased in enterprises operating in other service activities (8%), education (4%) and agriculture, forestry and fishing (3%). Micro-enterprises accounted for only 30% of the total turnover of enterprises.

The biggest share (41%) of the total turnover of enterprises was generated in trade. Compared to 2015, turnover in trade increased by 5%. Of the turnover of trade enterprises, 58% was generated in wholesale trade, 29% in retail trade and the share of wholesale and retail sale and repair of motor vehicles and motorcycles was 13%. The share of the first two has decreased somewhat compared to 2015. A considerable increase, however, occurred in the turnover of enterprises specialising in the wholesale and retail sale and repair of motor vehicles and motorcycles (mainly enterprises selling motor vehicles). Even though the sales of motor vehicles increased, the turnover of retailers of motor fuel dropped, mostly due to cheaper fuel. 37% of the retail trade turnover is generated in non-specialised stores selling predominantly food and beverages. However, this economic activity grew at a slightly slower pace than trade in total. In relative terms, turnover in trade increased the most in enterprises specialising in the retail sale of watches and jewellery, in non-specialised wholesale trade and in enterprises selling via mail order or the internet.

A considerable part (22%) of the total turnover of enterprises was generated in manufacturing, where turnover increased by 2% compared to the previous year. The biggest share of the turnover was generated in the manufacture of wood and products of wood (17%), the manufacture of food products (13%) and the manufacture of computers, electronic and optical products (14%). The share of the turnover generated in these economic activities decreased slightly – in the first two, turnover decreased, and in the third economic activity, turnover increased less than on average in manufacturing. The fall in the turnover of the manufacture of food products was due to a fall in the turnover of enterprises specialising in the processing and preserving of fish, crustaceans and molluscs and in the manufacture of bakery and farinaceous products. A significant increase in turnover was recorded in the manufacture of other transport equipment, the manufacture of wearing apparel, the manufacture of leather and related products and the manufacture of electrical equipment. Manufacturing is largely oriented towards export markets – sales to non-residents amounted to 62%. The respective indicator for 2015, however, was 63%. The share of sales to non-residents in turnover, i.e. export intensity, differed by economic activity, amounting e.g. in the production of beverages to 18%, but in the production of computers, electronic and optical products to 94%.

The number of persons employed in enterprises continued to increase by 2%, reaching 462,300. A quarter of persons employed were engaged in manufacturing, a fifth in trade and a tenth in construction. Approximately 2,000 additional persons became engaged both in construction and in trade. Employment decreased in agriculture, forestry and fishing, but also in manufacturing and in mining and quarrying. In the case of the first two economic activities, it should be noted that the 2015 level was relatively high and the number of persons employed exceeded that in previous (post-crisis) years. The decrease in mining and quarrying may have occurred mainly due to a fall in production, but the long-term impact also comes from the mechanisation of production.

Labour costs increased by 6% due to wage pressure, but their share in the cost base of enterprises remained at around 13%. By economic activity, labour costs accounted for the biggest share of total costs in human health and social work activities (50%) and for the smallest share in wholesale and retail trade and in the sale and repair of motorcycles (6%).

In 2016, the total profit of enterprises for the reporting year increased by 11% and exceeded 3.4 billion euros. In the previous two years, profit decreased. A considerable increase in profit was recorded in enterprises specialising in professional, scientific and technical activities, where profit grew by nearly 243 million euros (i.e. by three quarters). In this economic activity, growth relies largely on the activities of head offices; management consultancy activities, but also on scientific research and development. Trading companies also contributed substantially (171 million euros) to the profit growth of enterprises. Agriculture, forestry and fishing enterprises sustained a loss of more than 150 million euros. The loss was mainly due to forestry and logging enterprises, but negative impact came also from enterprises specialising in crop and animal production, hunting and related service activities.

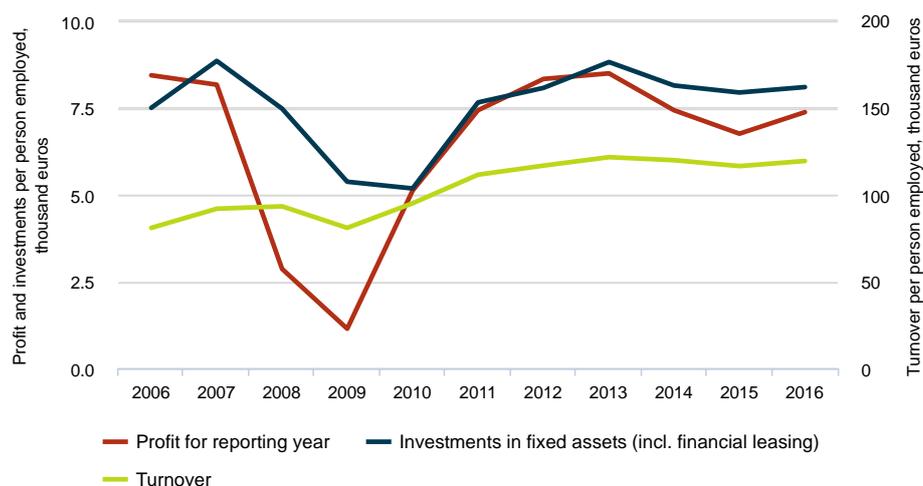
Enterprises specialising in wholesale trade, in wholesale and retail sale and repair of motor vehicles and motorcycles ensured growth in the trade profit. In retail trade, profit decreased slightly. One of the reasons for this is strong competition. Significant decrease in profit was seen in the retail sale of motor fuel.

The growth in profit was reflected also in improved profitability indicators. The value of the profit margin (i.e. the net profit to turnover ratio) was 6.16% in 2016 and 5.79% in 2015. Compared to preceding years (2011–2014), the indicator for 2016 was somewhat lower. A considerable growth in profit improved the value of the profit margin in professional, scientific and technical activities. Due to incurred losses, the profitability indicator for agriculture, forestry and fishing turned negative.

The average labour productivity per person employed by value added (i.e. the value added to number of persons employed ratio) increased by 6% and amounted to 26,800 euros. In 2016, the growth in the value added slightly exceeded the growth in labour costs, bringing about an increase in labour cost productivity after four years of decline. Labour productivity was the highest in water supply; sewerage, waste management and remediation activities and the lowest in other service activities. According to the 2015 data, the value added per person employed generated in Estonian enterprises was among the lowest compared to the respective indicator for other European Union countries. This was the case also in other Central and Eastern European countries.

Improved economic performance enabled enterprises to lay the ground also for further growth. Investments of enterprises in fixed assets in 2016 amounted to more than 3.7 billion euros, i.e. 4% more than a year earlier. Economic activities that contributed the most to investment growth were transportation and storage and administrative and support service activities. Investments in intangible fixed assets increased, but their share remained modest (around 4%). Investments made by enterprises operating in the industrial sector (excl. construction) decreased significantly. Investments continued to be the largest in real estate activities. Next by investment volume was manufacturing. Investments were mainly made in the acquisition, construction and reconstruction of buildings and in equipment, machinery and fittings. The main reason behind the growth in investments was an increase in the acquisition of transport equipment by a third. However, the growth resulted from the low base level in 2015; in 2012–2014, the level was higher than in 2016. The biggest negative impact on investments came from the decrease in investments made in construction and reconstruction of buildings. Investments per person employed were the largest in real estate activities and in electricity, gas, steam and air conditioning supply. Investments per person employed were the smallest in other service activities, human health and social work activities and in education.

Profit for reporting year, investments in fixed assets (incl. financial leasing) and turnover per person employed, 2006–2016



Source: Statistics Estonia

NUMBER OF ECONOMIC UNITS UP LAST YEAR

Katrin Aasmäe, Svetlana Šutova

In 2017, there were approximately 158,000 economically active units. 3,000 units were added, which is as many as in 2016. Considering legal form, the picture looks different – growth in the number of companies picked up and the number of non-profit associations decreased for the first time.

Two thirds of economically active units were companies (66%), sole proprietors accounted for 15%. Non-profit associations constituted 17% of all economically active units. Similarly to previous years, state and local government institutions accounted for less than 2%.

In total, there were 127,622 economically active enterprises (companies and sole proprietors), with companies numbering 103,500. In 2017, the number of companies increased by approximately 8,000, i.e. around 3,000 more units were added compared to 2016. As usual, the number of private limited companies grew – over 8,000 were added. The number of public limited companies declined again by more than 100 units. The number of active sole proprietors continues to decrease. In 2017, there were around 1,000 sole proprietors less – their number fell to 24,000.

The number of non-profit institutions declined by approximately 4,000 units, totalling slightly over 30,000 in 2017. The decrease resulted from decline in the number of non-profit associations, and the main reason for the latter was a change in the methodology for determining activity^a.

The number of government and local government institutions stayed almost the same. The administrative reform at the end of 2017 did not have a major impact on the population of economic units that were active during the year, because it also includes units that were active for only a part of the year. The impact will become obvious in the 2018 data, which will not include local government institutions that ceased activity in connection with the reform.

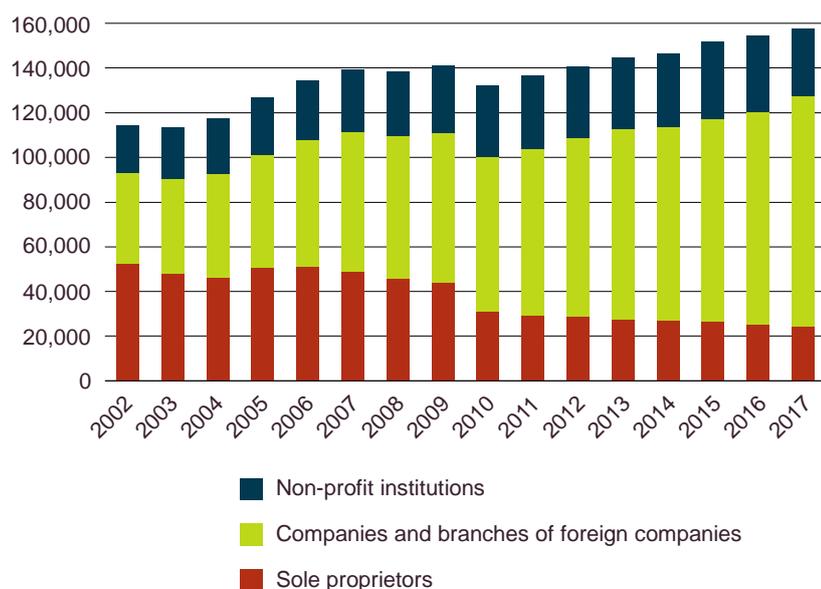
As in previous years, more than a half (56%) of enterprises (71,000) are located in Harju county, most of them (78% of all Harju county enterprises) in Tallinn. Year on year, over 5,000 enterprises were added in Harju county, 4,000 of these in Tallinn. In 2017, the number of active enterprises increased in all counties. The most enterprises were added in Tartu (440) and Pärnu (220) counties. There were slightly over 13,500 economically active enterprises in Tartu county, followed by Pärnu county with around 7,500 and Ida-Viru and Lääne-Viru counties with 6,500 and 4,500 enterprises, respectively. Less than 100 enterprises were added in Jõgeva, Järva, Valga, Põlva and Võru counties. The growth in the number of enterprises was smallest in Hiiumaa county (5 enterprises).

The number of micro-enterprises increased the most, with approximately 7,000 added in a year – over twice as many as in 2016 when 3,000 were added. Micro-enterprises are enterprises without salaried employees or with less than 10 employed persons, and they constitute 94% of all active enterprises in Estonia. In 2017, there were approximately 120,000 micro-enterprises. The highest number was added in Harju county. The number of large enterprises (with at least 250 employed persons) was 200 in 2017 (same as the previous year), with over a half operating in Tallinn. Similarly to 2016, around 70% of large enterprises were located in Harju county, followed by Tartu (8%) and Ida-Viru (5%) counties. There were approximately 100 small enterprises (with 10–49 employed persons) added, while the number of medium-sized enterprises (50–249 employed persons) decreased by 34.

New enterprises were added in every economic activity, excl. agriculture where their number continues to decline. The number of active enterprises increased the most (27%) in financial and insurance activities – over 400 enterprises were added. The biggest increase occurred in the number of enterprises engaged in professional, scientific and technical activities (over 1,000 were added, i.e. twice as many as the previous year). The economic activities of construction, information and communication, and wholesale and retail trade grew by slightly under a thousand enterprises. The number of enterprises in accommodation and food service activities increased 6.5%; over 200 active enterprises were added compared to 2016.

^a Non-profit associations are considered economically active if it is not known that activity was suspended or ceased. These non-profit associations have submitted data to Statistics Estonia (for statistical activities), the Tax and Customs Board (tax and/or customs declarations), the commercial register (recorded turnover in 2016 annual reports) or are apartment associations. In the previous years, all non-profit associations were considered active if there was no information regarding suspension or cessation of activity.

Economically active units by legal form, 2002–2017



Source: Statistics Estonia

In order to examine the level of globalization of business in Estonia and the role of enterprise groups in the economy, especially of multinational groups, Statistics Estonia has been regularly collecting data on enterprise groups operating in Estonia since 2005.

In 2017, enterprise groups continued to play an important role in the Estonian economy. 9% of all economically active units (12,453 enterprises) were part of enterprise groups. In 2017, enterprise groups accounted for approximately 63% of the turnover^a of Estonian enterprises and employed over a third of all persons employed.

The number of enterprise groups increases every year, and 6,988 enterprise groups operated in Estonia in 2017. As compared to domestically controlled enterprise groups, foreign enterprise groups are added at a slower rate, their share has continuously decreased. Whereas in 2004 foreign enterprise groups constituted about a half of all enterprise groups, their share had diminished to 32% in 2017.

In 2017, enterprises belonging to Estonian enterprise groups accounted for 7% and members of foreign enterprise groups for 2% of all economically active enterprises. The contribution of enterprise groups to employment in Estonia has been significant over the years – enterprise groups employed 36% of all employed persons in 2017. Employment in enterprise groups increased 3% in 2017 year on year – both in domestically and foreign-controlled groups.

In 2017, foreign enterprise groups employed 16% of all persons employed in Estonia and generated 30% of the net turnover of enterprises. Enterprise groups of 64 countries had subsidiaries in Estonia. 86% of the foreign enterprise groups were controlled by a European group head. Of the 28 Member States of the European Union, only Portugal and Croatia did not have any active subsidiaries in Estonia in 2017. The enterprise groups of Finland, Sweden, Latvia, Lithuania and the United Kingdom had the greatest impact on the Estonian economy.

As usual, the impact of foreign enterprise groups on employment was greatest in financial intermediation, where 60% of the persons employed in the economic activity worked in units of foreign enterprise groups. In 2017, foreign enterprise groups employed every third person employed in manufacturing, information and communication, and administrative and support service activities.

Estonian enterprises have set up subsidiaries in 65 countries, mainly in Europe but also in Asia, North and South America, Australia and Africa. Still, Estonian multinational groups were primarily interested in doing business in the closest countries (Latvia, Lithuania, Finland and Russia) where the business conditions are most familiar.

Economic units registered in legal registers are not all economically active. Economic statistics are produced based on the data of economically active units. In this article, the population of economically active units was analysed – its volume, geographical distribution and distribution by economic activities.

Statistics Estonia maintains the Business Register for Statistical Purposes since 1994. The population of economically active units in the register serves as a basis for producing economic statistics. For updating the Business Register for Statistical Purposes, data from the following registers are used: the commercial register, the non-profit associations and foundations register, the register of taxable persons and the state register of state and local government institutions. In addition to legal registers, other data sources are used, such as statistical and financial reports. The Business Register for Statistical Purposes includes all registered units, but unlike legal registers, the Business Register for Statistical Purposes determines at the end of each year the population of economically active units in the corresponding year. This includes all units that were economically active in the reference year, including the ones that were active only during a part of the reference period.

^a Turnover does not include the data of financial intermediation enterprises, because their income statement differs from that of other enterprises.

TRADE TURNOVER INCREASED YEAR ON YEAR

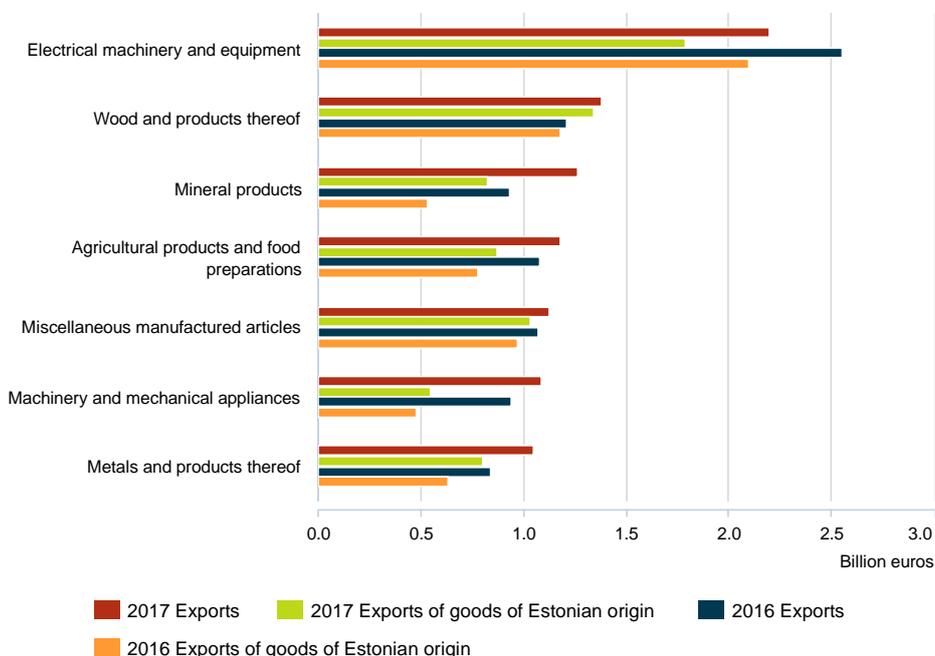
Evelin Puura, Mirgit Silla

In 2017, exports of goods from Estonia totalled 12.9 billion euros and imports to Estonia 14.7 billion euros at current prices. Trade turnover increased for the second consecutive year, exports grew by 8%, or approximately 1 billion euros and imports grew by 9%, or 1.2 billion euros compared to 2016.

The trade deficit in 2017 was 1.9 billion euros. Compared to 2016, the deficit increased by 264 million euros. The biggest surplus was recorded in trade in wood and articles of wood and miscellaneous manufactured articles (incl. furniture and prefabricated wooden buildings) and the biggest deficit in trade in transport equipment and raw materials and products of the chemical industry.

As in previous years, electrical machinery and equipment was exported the most from Estonia. It accounted for 17% of Estonia's total exports in 2017. Electrical machinery and equipment was followed by wood and articles of wood (11%) and mineral products (10%). The increase in exports was mainly caused by a rise in the exports of mineral products (36%), metals and products thereof (25%) and wood and articles of wood (14%). The greatest year-on-year decrease was recorded in the exports of electrical machinery and equipment (14%).

Exports by main commodity section and commodity chapter, 2016, 2017



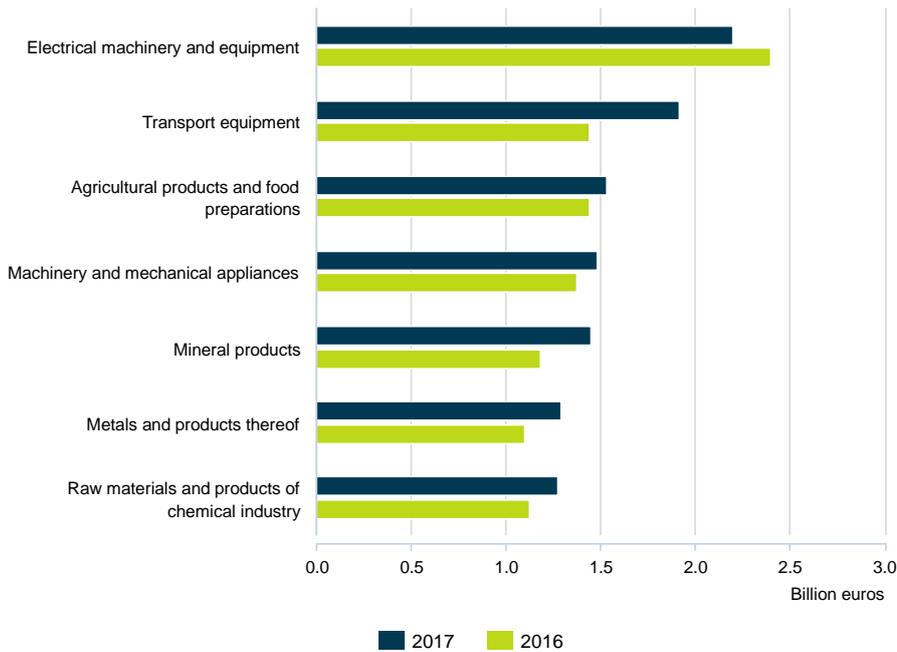
Source: Statistics Estonia

The share of goods of Estonian origin in total exports has remained stable in recent years – at 72%. Among the top destination countries for exports from Estonia, the share of exports of goods of Estonian origin was the biggest for Denmark – 92% of all the goods exported from Estonia to Denmark were of Estonian origin. Denmark was followed by Sweden (91%), Norway and the United Kingdom (both 90%). Among the main destination countries for Estonia's exports, the share of Estonian goods was the smallest in dispatches to Russia (25%), Lithuania (39%) and Latvia (50%).

By commodity section, the biggest share of goods of Estonian origin was recorded in the exports of wood and articles of wood (97%). The second largest share was contributed by the exports of miscellaneous manufactured articles (incl. furniture, mattresses, prefabricated buildings) (92%). Paper and articles thereof was third (88%).

The biggest share in imports was held by electrical machinery and equipment, accounting for 15% of Estonia's total imports. The second place was held by transport equipment (13%) and the third place by agricultural products and food preparations, machinery and mechanical appliances and mineral products (10% each). The biggest year-on-year increase was recorded in the imports of transport equipment (33%) and mineral products (22%), whereas the imports of electrical machinery and equipment declined (8%).

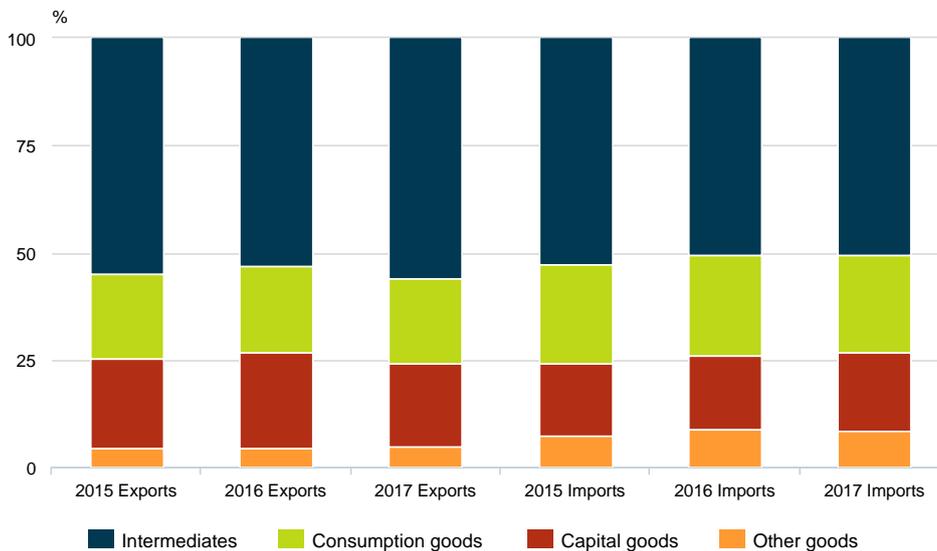
Imports by main commodity section and commodity chapter, 2016, 2017



Source: Statistics Estonia

Based on end-use, goods can be classified as capital goods, intermediate goods or consumption goods. The biggest share in Estonia's total exports in 2017 was held by intermediates, i.e. inputs for the production of other goods, which amounted to 56% of total exports. Compared to 2016, the exports of intermediate goods increased by 14 percentage points. In 2017, capital goods accounted for 20% of Estonia's total exports, which is 2 percentage points less than the year before. In 2017, the exports of capital goods decreased by 5%, mainly due to a fall in the exports of electrical machinery and equipment. The exports of consumption goods accounted for 20% of Estonia's total exports – as much as in 2016. In 2017, the exports of consumption goods increased by 6% compared to the previous year.

Exports of goods by Broad Economic Categories, 2015–2017



Source: Statistics Estonia

Intermediate goods held the biggest share also in imports – 50% of total imports. The imports of intermediates increased by 9 percentage points year on year. The second place was occupied by consumption goods (23%) and the third place by capital goods (18%). The large share of intermediate goods in imports shows that Estonia's manufacturing industry is dependent on imported components. The imports of consumption goods are an indicator of internal demand. The imports of consumption goods increased by 6% compared to 2016. The rise in these imports indicates Estonia's increasing domestic consumption.

Estonia exported goods to 180 countries and imported goods from 133 countries. A positive foreign trade balance was recorded in the case of 130 countries. The biggest surplus – 455 million euros – was recorded in trade with Sweden, which

was followed by Norway with 420 million euros and the USA with 226 million euros. The biggest deficit was recorded in trade with Poland and Germany – 794 million and 625 million euros, respectively.

Estonia's most important trading partner for exports in 2017 was Finland (see the table at the end of article). Finland accounted for 16% of Estonia's total exports. Exports to Sweden accounted for 13% and exports to Latvia for 9% of total exports. The largest year-on-year increase was recorded in dispatches to Germany (up by 236 million euros, or 34%), Finland (up by 160 million euros, or 8%) and Russia (up by 159 million euros, or 20%). The largest decrease was registered in exports to Sweden (down by 402 million euros, or 19%), Mexico (down by 89 million euros, or 48%), and Nigeria (down by 23 million euros, or 65%).

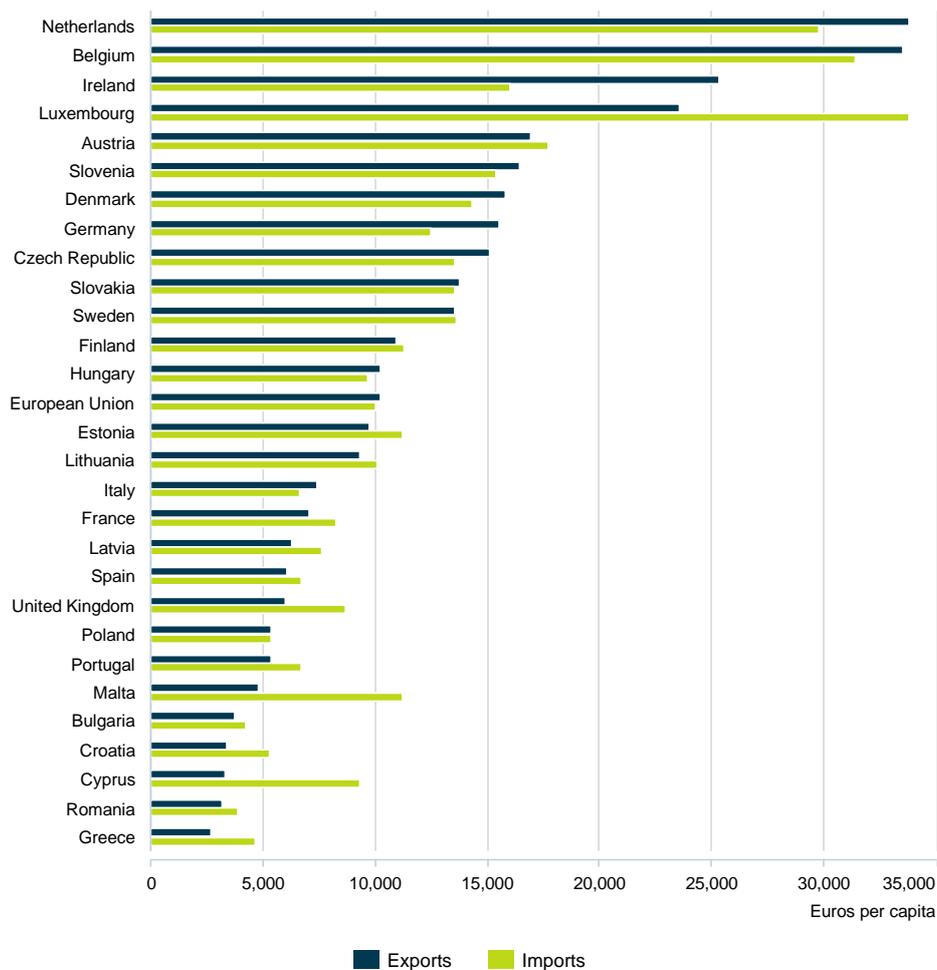
The biggest share of goods imported to Estonia in 2017 came from Finland, which accounted for 14% of Estonia's total imports. Finland was followed by Germany (11%), Lithuania and Sweden (both 9%). Compared to 2016, the biggest increase was recorded in arrivals from Finland (up by 150 million euros, or 17%) and Russia (up by 183 million euros, or 24%). The most significant decrease occurred in imports from Hungary (down by 173 million euros, or 63%) and the USA (down by 45 million euros, or 23%).

In 2017, the share of European Union (EU) countries in Estonia's total exports was 72% and in total imports – 82%. The trade deficit with other EU countries totalled 2.9 billion euros, which is 557 million euros more than in 2016. Trade with EU countries increased in 2017 compared to 2016 – exports by 5% and imports by 9%. Trade with non-EU countries grew as well: exports increased by 543 million euros and imports by 250 million euros. The balance of trade with non-EU countries was in surplus – exports to those countries accounted for 1 billion euros more than imports from those countries. Exports to the 19 euro area countries accounted for 49% of Estonia's total exports, while imports from the euro area countries made up 59% of Estonia's total imports.

In 2017, Estonia's exports increased by 8% and imports by 9% compared to 2016. Similar increase occurred also in the exports and imports of the EU as a whole. The imports of the entire euro area increased by 9%, or 303 billion euros year on year, and exports grew by 7%, or 277 billion euros. The greatest decline compared to 2016 in exports among EU countries was experienced by Malta (22%, or 624 million euros). Exports increased the most in Germany (6%, or 76 billion euros) and the Netherlands (12%, or 61 billion euros). The exports of our main trading partners increased – exports in Finland grew by 15%, or 8 billion euros, in Sweden by 8%, or 9.5 billion euros, in Latvia by 12%, or 1.3 billion euros and in Lithuania by 17%, or 3.8 billion euros. Imports grew in Finland by 13%, or 7.1 billion euros, in Sweden by 7%, or 9.1 billion euros, in Latvia by 16%, or 2 billion euros and in Lithuania by 16%, or 4.1 billion euros.

In 2017, the share of Estonia's exports in EU exports amounted to 0.3% and the share of imports also to 0.3%. In terms of both the exports and imports turnover, Estonia outperformed Latvia, Malta and Cyprus. In Estonia, exports in 2017 amounted to 9,737 euros per capita, which is approximately 500 euros below the EU average (10,217 euros). Exports per capita were the smallest in Greece, Romania and Cyprus. Exports include not only the country's own output but also the mediation of goods produced in other Member States through the given country, i.e. re-exports. Re-exports have the biggest impact on foreign trade in the Netherlands and Belgium, where the export figures for 2017 were the highest in the EU – 33,788 euros per capita in the Netherlands and 33,494 euros per capita in Belgium. Estonia's imports per capita amounted to 11,194 euros – approximately 1,200 euros more than the EU average (10,032 euros). The biggest per-capita imports of goods were recorded in Luxembourg (33,810 euros), Belgium (31,433) and the Netherlands (29,762), while the smallest ones were reported in Romania (3,846), Bulgaria (4,248) and Greece (4,673).

Exports and imports of goods per capita in the European Union, 2017



Source: Eurostat

Exports and imports by continent, group of countries and main countries, 2016–2017

(million euros)

	2016			2017		
	Exports	Imports	Trade balance	Exports	Imports	Trade balance
TOTAL	11,905	13,514	-1,609	12,861	14,734	-1,873
European Union	8,805	11,144	-2,339	9,219	12,114	-2,895
Non-EU	2,379	1,507	872	2,696	1,709	988
Euro area (19 countries)	5,521	7,916	-2,395	6,301	8,723	-2,421
OECD	8,297	9,302	-1,005	8,691	9,996	-1,305
CIS	932	882	49	1,117	1,119	-3
Europe	10,387	12,326	-1,940	11,084	13,543	-2,459
Finland	1,913	1,762	150	2,072	2,070	2
Sweden	2,135	1,125	1,011	1,733	1,278	455
Latvia	1,097	1,127	-30	1,175	1,249	-75
Germany	696	1,496	-799	933	1,584	-652
Lithuania	713	1,272	-559	747	1,378	-631
Asia	593	902	-309	763	949	-187
China	168	556	-388	219	596	-377
Saudi Arabia	39	11	28	95	18	76
Japan	73	22	51	70	27	44
Hong Kong	21	75	-54	23	66	-43
Korea, Republic of	46	58	-11	65	60	5
Africa	179	22	158	185	19	166
Togo	75	0	75	57	-	57
Egypt	13	3	9	32	4	27
Algeria	5	-	5	21	-	21
Nigeria	36	6	31	13	5	8
South Africa	7	3	3	8	4	4
America	629	247	382	652	205	447
USA	316	193	123	374	148	226
Canada	89	24	65	100	14	85
Mexico	185	4	181	96	11	86
Brazil	20	12	8	20	21	0
Chile	4	6	-2	4	5	-1
Australia and Oceania	34	15	20	47	17	30
Australia	33	12	20	43	13	29
New Zealand	1	2	-1	4	3	0
Antarctica	3	-	3	2	-	2
Country unspecified	80	3	77	129	1	128

PRODUCTION OF CEREALS INCREASED YEAR ON YEAR

Laura Kütt, Ivika Aasa

The total area of utilised agricultural land did not change considerably in 2017. Production of field crops was higher than in the previous year, but a lot of production was not harvested. The number of pigs increased and the number of cattle also increased slightly. Less meat but more milk and eggs were produced than in the previous year.

In 2017, the area of utilised agricultural land in Estonia was 1,002,200 hectares, which is roughly the same as the year before. Of this, 993,000 hectares were in the possession of agricultural holdings and 9,200 hectares in kitchen gardens and agricultural households. In the latter, mainly fruit trees and berries, vegetables and potatoes are grown.

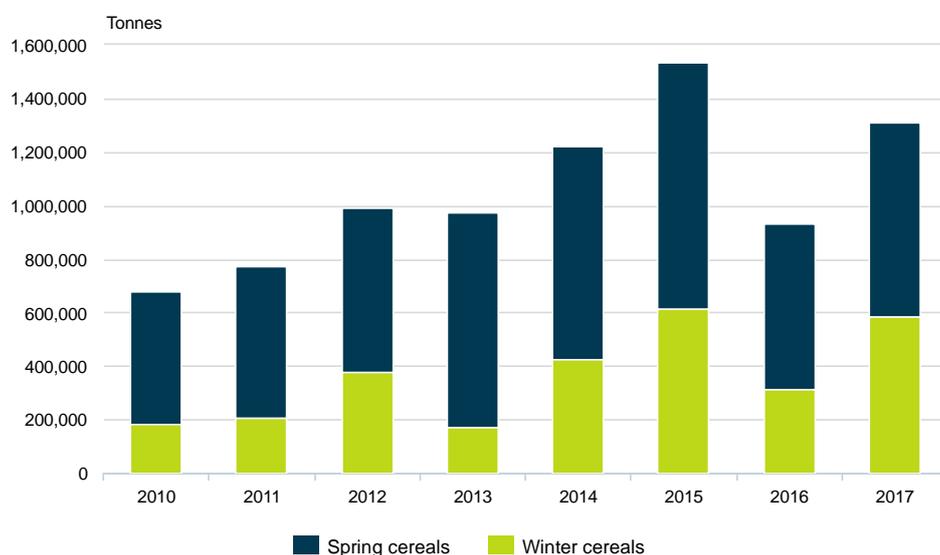
678,800 hectares of the utilised agricultural land was arable land, 316,300 hectares permanent grassland and 7,100 hectares was under permanent crops (fruit and berry orchards, nurseries and other permanent crops). The share of permanent grassland temporarily not used for production in utilised agricultural land was 6% in 2017, which is 2 percentage points more than in 2016. The area of arable land in 2017 was 2% smaller than in 2016.

The sown area of cereals decreased by 6% year on year, but the total production of cereals was smaller only in comparison with the record harvest in 2015, which amounted to 1,535,280 tonnes. 6% of the sown area of cereals – mainly spring cereals – were not harvested. The sown area of winter cereals was 14% larger than the year before, which, due to higher yield of winter cereals, considerably helped to increase the total production. The sown area of spring cereals decreased by 15% compared to 2016.

Cereals were grown on 330,700 hectares in 2017. The share of winter cereals in the sown area of cereals was 38%. Winter wheat accounted for 31%, rye for 4%, spring barley for 30% and spring wheat for 20% of the sown area of cereals. The remaining 15% were winter barley, triticale, oats, mixed grain and buckwheat. Compared to 2016, the sown area of winter wheat was 13% larger and the sown area of spring wheat 9% smaller. The sown area of rye increased by 8% year on year.

Compared to the preceding year, the production of cereals in 2017 was considerably higher, regardless of unfavourable weather conditions during the harvest period – 1,311,900 tonnes, i.e. an increase of 40%. Compared to the very large production of 2015, the production, however, was 15% smaller. Wheat accounted for 54%, barley for 32%, oats for 7% and rye for 4% of the total production of cereals. The remaining 3% were triticale, mixed grain and buckwheat combined.

Cereal production, 2010–2017



Source: Statistics Estonia

Weather conditions and the proportion of winter cereals, which give better yields, have a substantial impact on the cereal production. The production of cereals in 2016 was low – in winter, 7% of winter cereals were destroyed and the weather conditions in the growing season were unfavourable. In 2017, winter crops had wintered well (winter damage amounted to only 1%) and weather conditions in the growing season were favourable. However, a significant share of spring crops was not harvested due to unfavourable weather conditions during the growing season.

The average yield of cereals in 2017 was 3,967 kilograms per hectare. Compared to the preceding year, it increased by nearly one and a half times and was 9% lower than the record yield in 2015. The yield of winter cereals increased by 63% year on year. The yield of rye increased by 50%, amounting to 3,932 kilograms per hectare, and the yield of winter wheat increased by 65%, totalling 4,699 kilograms per hectare.

The sown area of rape and turnip rape increased by 5% and that of winter rape and winter turnip rape by 37% compared to 2016. Unlike in 2016, the yield of winter rape and turnip rape exceeded that of spring rape and turnip rape. The production of rape and turnip rape seed was 165,300 tonnes from 73,800 hectares. The average yield was 2,240 kilograms per hectare. Compared to 2016, the average yield was 53% higher. The average yield of spring rape and turnip rape increased by 23% year on year and that of winter rape and turnip rape by 90%. The total production of rape and turnip rape was 61% higher than in 2016. 7% of the sown area of spring rape and turnip rape was not harvested.

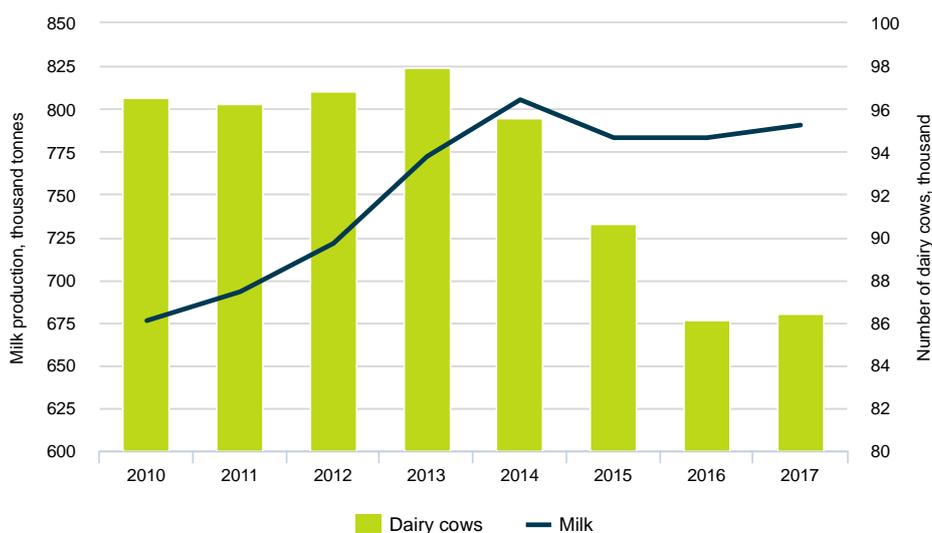
The area of annual and multiannual forage crops as well as the area of permanent grassland for forage production were 4% smaller than in the preceding year. The area of permanent grassland for forage production decreased due to an increase in the area of permanent grassland temporarily not used. At the same time, the total area of permanent grassland increased by 3% compared to the preceding year (mainly because permanent grasslands were restored, due to which, the area of arable land decreased by approximately 8,000 hectares).

The growing area of potatoes decreased by 5% year on year. In 2017, potatoes were grown on 5,400 hectares, of which 36% in kitchen gardens and agricultural households. 91,200 tonnes of potatoes were harvested from the total area under potatoes. The average potato yield was 16,925 kilograms per hectare, which is 6% more than the year before. 12% of the growing area of potatoes was not harvested. In 2017, the production of potatoes per inhabitant was 69 kilograms – 1 kilogram more than in the preceding year.

The growing area of open-field vegetables increased by 10% year on year and was 3,400 hectares in 2017. 31% of open-field vegetables and as much as 91% of vegetables grown under glass are grown in kitchen gardens and agricultural households. The total production of vegetables was 5% smaller than the year before, amounting to 59,200 tonnes, of which 49,300 tonnes were open-field vegetables. In 2017, the production of vegetables was 45 kilograms per inhabitant (47 kg in 2016).

In 2017, the number of cattle increased by 1%, the number of dairy cows by 0.3% and the number of other cows by 3%. Therefore, the number of dairy cattle has increased somewhat after the fall that started in 2013 due to a crisis in milk prices. At the end of 2017, there were 250,900 cattle in Estonia, including 86,400 dairy cows and 28,700 other cows.

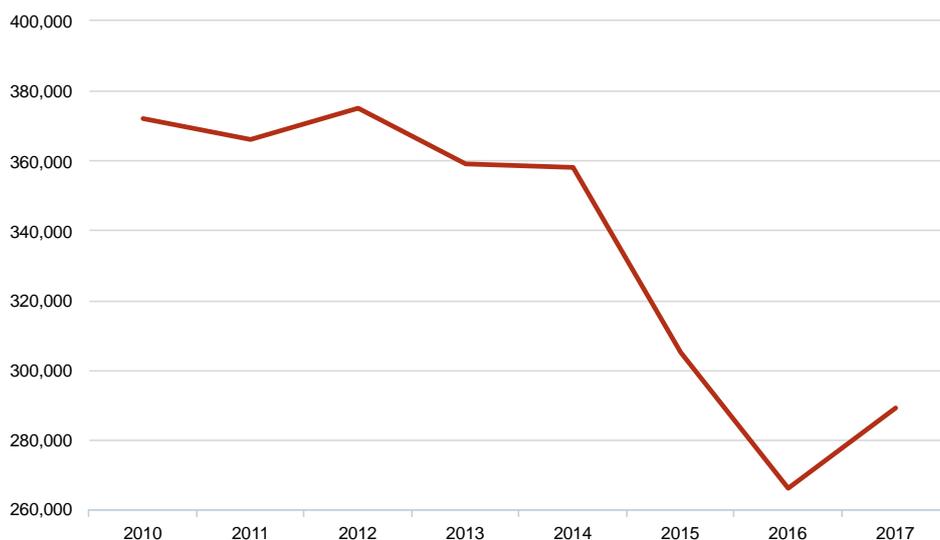
Number of dairy cows and milk production, 2010–2017



Source: Statistics Estonia

By the end of 2017, the number of pigs increased by 9% year on year. This was the first increase after the African swine fever crisis, which hit in 2014. At the end of 2017, the number of pigs totalled 289,100. The number of sheep and goats decreased by 5% year on year. In total, the number of sheep and goats amounted to 85,900. The number of poultry increased by 7% year on year and totalled 2.3 million at the end of 2017.

Number of pigs, 2010–2017



Source: Statistics Estonia

At the end of 2017, the share of cattle in Estonia in the total number of cattle in the European Union (EU) countries was the same as in 2016 – 0.3%. The share of dairy cows and pigs also remained the same (respectively 0.4% and 0.2%). In the EU as a whole, the number of cattle as well as the number of dairy cows decreased slightly in 2017, but in Estonia, an opposite trend was observed. Among the neighbouring countries, both the number of cattle and that of dairy cows declined year on year the most in Lithuania and less in Latvia and Finland. By the end of 2017, the total number of pigs increased in the EU as a whole and in Estonia. The number of pigs fell in Lithuania and Finland and a bit less also in Latvia.

In 2017, milk production in Estonia totalled 790,600 tonnes – 1% more than the year before. Milk yield per cow has been growing year by year and in 2017 amounted to 9,160 kilograms – 3% more than the year before. This is the highest ever yield per cow in Estonia, and with this result, Estonia placed second in the EU after Denmark. 600 kilograms of milk was produced per inhabitant, which is 6 kilograms more than in 2016.

In 2017, meat production amounted to 71,500 tonnes, 54% of which was pork, 29% poultry meat, 17% beef and 1% sheep and goat meat. The production decreased by 8% year on year. In 2017, meat production per inhabitant was 54 kilograms, which is 5 kilograms less than the year before. Even though the number of pigs increased by the end of 2017, the production of pork did not, as an increase in meat production takes almost a year after an increase in the number of animals.

Egg production increased by 4% year on year. 207 million eggs were produced in 2017. The average egg yield per hen in the agricultural holdings of legal persons totalled 289 eggs. Egg production per inhabitant amounted to 157 eggs, which was slightly more than in 2016 (151). Honey production amounted to 1,165 tonnes in 2017, which is 6% more than the year before.

FISH CATCH AND AQUACULTURE PRODUCTION STABLE IN RECENT YEARS

Evelin Enno-Sakwan

In 2017, commercial fish catch (the Baltic Sea, inland waters and ocean catch) did not change considerably compared to 2016. However, aquaculture production sold in 2017 was the largest in the last 5 years.

Fishing has always been important in Estonia, as it is a maritime country. The most fish is caught from the Baltic Sea. In the last decade, the Baltic Sea catch has totalled on average around 65,500 tonnes a year. In 2017, the quantity of fish caught from the Baltic Sea was 64,476 tonnes, which accounted for 78% of the total catch. The quantities caught in 2017 did not differ very much from those of 2016: in 2017, just slightly over 4,000 more tonnes of fish were caught. Baltic Sea fishing is divided into trawling vessel and coastal fishing, with the largest quantities caught in the open sea. By year, the share of trawling vessel catch has remained on the same level, at around 80%, and coastal catch quantities have also remained unchanged.

The European sprat and the Baltic herring are caught the most: in 2017, the share of these species accounted for 96% of the total Baltic Sea catch and 75% of the total commercial catch in Estonia. For years, the European sprat and the Baltic herring catches have been followed by the European perch, the European spelt and flounder: in 2017, the catches were respectively 1,291 tonnes, 411 tonnes and 187 tonnes. The catches of Atlantic cod as a commercially important species have been small: in 2017, only 0.9 tonnes of Atlantic cod were caught from the Baltic Sea. Cod fishing is restricted by a strict catch quota, because the Baltic Sea cod resources have long remained under the spawning stock biomass limit value. The reason for the latter is poor reproduction conditions and long-lasting strong fishing pressure.

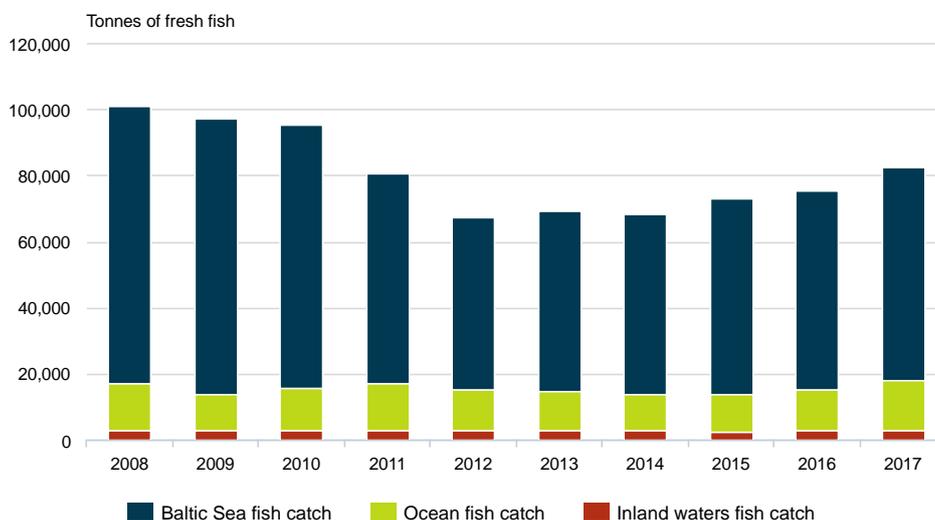
Fish catch from inland waters has remained at about the same level over the years – the average annual catch in 2008–2017 was approximately 2,800 tonnes. The total inland waters catch in 2017 was 2,955 tonnes. Fish is mostly caught from Lake Peipus, amounting to approximately 2,627 tonnes in 2017, which is almost the same compared to the previous year. Fish catches from Lake Peipus have remained on the same level over the last ten years, accounting for an average of 85% of the total inland waters catch.

The waterbody next in importance is Lake Võrtsjärv, contributing approximately 8% of the total catch from inland waters in 2017. The rest of the waterbodies such as River Emajõgi, River Narva and Narva reservoir and other smaller rivers and lakes yielded approximately 5% of the total inland waters catch in 2017. The main species caught in 2017 from inland waterbodies were pike-perch (918 tonnes), freshwater bream (846 tonnes) and the European perch (682 tonnes).

Distant waters fishing, or ocean fishing, yielded 18%, i.e. 15,135 tonnes, of the total commercial catch in Estonia. Compared to 2016, ocean catch has slightly increased – in the range of 3,000 tonnes. In 2008–2017, the average distant waters catch has been approximately 12,500 tonnes a year. The main areas of ocean fishing are the North-Western and North-Eastern parts of the Atlantic Ocean, with more caught from the North-Eastern part. In 2017, the catch in the North-East Atlantic amounted to 10,390 tonnes, which corresponds to around 69% of the total ocean catch.

Northern prawn is caught the most from the North-Eastern part of the Atlantic Ocean – 7,413 tonnes, i.e. 49% of the total ocean catch, in 2017. Atlantic redfish holds the largest share in the North-Western Atlantic catch – approximately 2,194 tonnes, i.e. 15%, of the total distant waters catch in 2017. Besides the aforementioned species, the catch quantities are also larger in the case of the Atlantic cod, the American plaice and the Greenland halibut. In 2017, the catches were 2,544 tonnes, 1,249 tonnes and 1,141 tonnes, respectively, totalling 33% of the total distant waters catch.

Fish catch, 2008–2017



Source: Statistics Estonia

Aquaculture enterprises^a sold 870 tonnes of commercial fish and crayfish in 2017. The sold quantity was the largest of the last 5 years. In 2014, a record quantity (869 tonnes) of commercial fish and crayfish was sold. In 2017, the quantity of sold production exceeded the previous highest quantity by 1.5 tonnes. The growth in fish and crayfish production has occurred mainly over the last five years: compared to 2013, the quantity of production sold in 2017 was 1.2 times larger.

In Estonia, the biggest share in the sold aquaculture production is contributed by rainbow trout. Its share has increased year by year. In 2013, the share of rainbow trout in the sold fish and crayfish production was 63%, whereas in 2017, it was 81%. In 2017, the quantity of rainbow trout sold was 702 tonnes – the largest quantity sold in the last five years.

The quantity of the European crayfish sold in 2017 was 0.8 tonnes, which is 1.2 times more than the year before. In addition to rainbow trout and the European crayfish, other fish species are farmed and sold: the Arctic char, the European eel, the African sharp-tooth catfish, common carp, wels catfish, sturgeons (the Siberian and Russian sturgeon) and grass carp.

Fish roe for human consumption was sold in 2017 in the amount of 3.8 tonnes, which is approximately 1.1 tonnes less than in 2016. In 2017, the share of commercial fish and crayfish production sold to foreign countries was 5% – a decrease of 4 percentage points compared to 2016. Mainly the European eel and to a lesser extent rainbow trout and the European crayfish were exported.

^a Aquaculture is the rearing or cultivation of aquatic organisms using techniques designed to increase the production of the organisms in question beyond the natural capacity of the environment; the organisms remain the property of a natural or legal person throughout the rearing or culture stage, up to and including harvesting (Council Regulation (EC) No 1198/2006 of 27 July 2006 on the European Fisheries Fund).

HALF OF THE ESTONIAN TERRITORY ARE FORESTS

Mati Valgepea

Forests are one of the most important renewable resources and living environments in Estonia. Forest protection and management have various impacts on the environment, economy and social life. In recent years, forest harvesting has reached the level of 10–11 million cubic metres. Due to active use of forests, greater importance should be attributed to forest protection, regeneration and maintenance works.

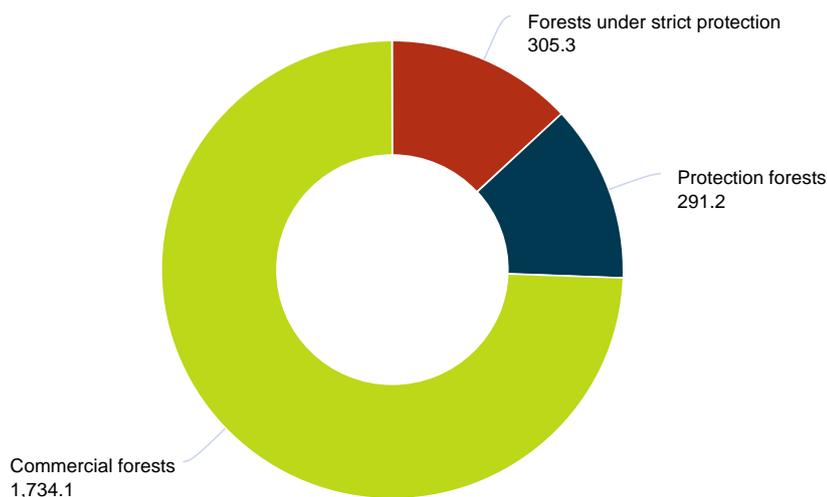
Forests cover a half (51.4%) of Estonia's land territory. In 2017, the total forest area in Estonia was 2.33 million hectares and the total growing stock of stands was 486 million cubic metres. Stocked forest land, i.e. the area of stands, was 2.16 million hectares. The most common stands were pine (32.1% of the total area of stands), birch (30.1%), spruce (17.5%) and grey alder stands (9.0%). The total growing stock of stem wood, growing stock per hectare of forest area, as well as the annual increment of growing stock has been increasing gradually since 2000. According to data of the Food and Agriculture Organization of the UN, in terms of forest coverage (share of forest area in land area) Estonia ranks sixth in Europe after Finland, Sweden, Slovenia, Montenegro and Latvia. Forests provide approximately 34,000 jobs in the forestry sector and many jobs also indirectly in tourism, sports, transport and other sectors. In Estonia, there are a total of over 100,000 natural persons who are private forest owners.

The main source of statistics on forests is the National Forest Inventory (NFI), i.e. a statistical forest inventory. The NFI is a sample survey where on small sample plots placed by systematic random sampling method, forest land and the characteristics of growing trees are measured and assessed. In 2016, the calculation rules for the indicators calculated on the basis of measurement results were reviewed in detail. The main change concerned calculating the increment – the calculation formulas based on growing stock were replaced by calculation rules based on changes found in the data of remeasurements of particular trees. In 2017, the measurement data for all previous years were re-examined and needful corrections were made where mistakes were detected. New estimates were calculated in retrospect according to the revised calculation rules and amended source data for all NFI indicators for 2000–2016. Mostly, the recalculated estimates did not differ considerably from the previous ones.

In the current decade, the “Estonian Forestry Development Program until 2020” is the basis for the development of forestry. The principal goals set for forestry are safeguarding the productivity and viability of forests and ensuring the varied and effective use of forests. In order to achieve these aims, it is important in the long term to procure wood in the amount of the increment, increase the volume of reforestation, keep at least 10% of the forest area under strict protection and enhance the typological representativity of protected forests. The share of strictly protected forests in the total area of forests was 13.1% in 2017, but further efforts are required to safeguard the typological representativity of strictly protected areas. At the end of 2017, the Minister of the Environment initiated the proceedings for the establishment of 64 new nature conservation areas to take by the end of 2018 additionally under strict protection 26,907 hectares of nemoral forests, mesoeutrophic forests, and herb-rich mixed forests on clay soil. According to the principles of determining the protected areas, a total of approximately 33,000 hectares of state forest land will be taken under strict protection to bridge the typological gaps. 90% of forests under strict protection are on state land. All protected forests accounted for a quarter of the total area of forest land in Estonia.

Forest area by protection regime, 2000–2017

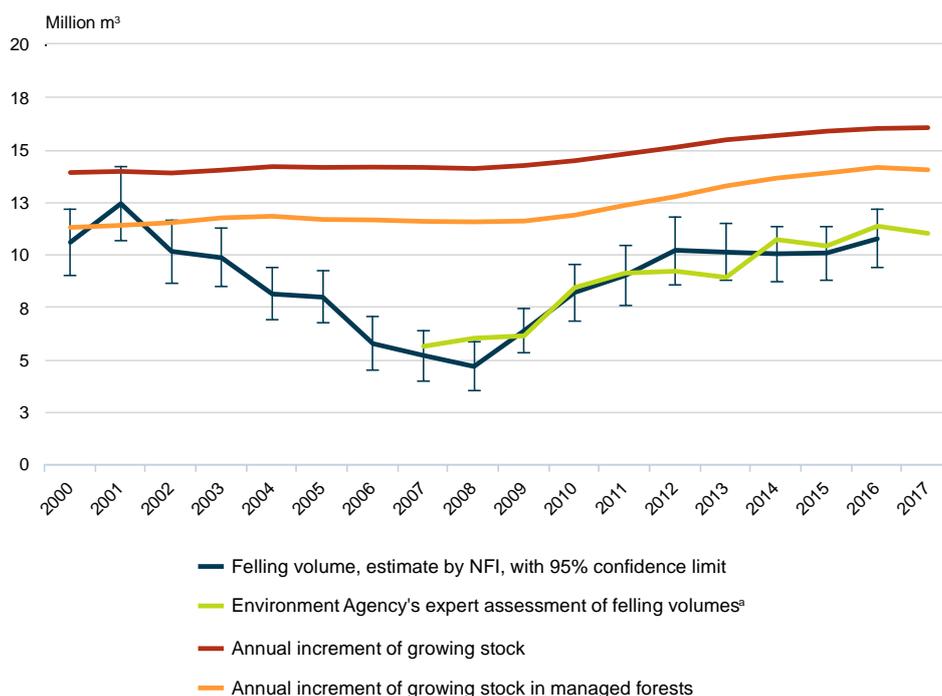
(1,000 ha)



Source: Estonian Environment Agency, National Forest Inventory 2017

One of the possible ways of assessing sustainability of forestry is to compare felling volume with the annual increment of stem wood in forests available for wood supply. If the felling volume exceeds the increment over a longer period, it is a threat to biodiversity and the sustainability of raw material supply of the forest sector. On the other hand, a low ratio of felling volume to the increment indicates inefficient use of forest resources. According to the NFI, in 2001–2008, felling volume decreased by more than 60%, reaching 4.6 million cubic metres. Thereafter, felling volume started to increase gradually and remained at 10 million cubic metres in 2012–2016 (felling volume in 2016 was 10.7 million m³). In 2008, the share of felling was 36% in the increment of managed forest land; in 2016 it was 75%. As the error due to the use of the NFI statistical sampling method for felling estimates is significant, the Estonian Environment Agency has compiled expert assessments based on the analysis of felling documentation and remote sensing data, which also show that the felling volume has increased moderately in recent years. According to the afore-mentioned assessments, 10.1 million cubic metres of wood was felled in Estonia in 2015, 11.3 million m³ in 2016 and 11.0 million m³ in 2017. As the share of mature stands in Estonian forests is relatively large, from forest management perspective, the felling volumes could be even higher. The “Estonian Forestry Development Program until 2010” specified 13.1 million cubic metres as the optimum forest harvesting level. For this decade, 12–15 million m³ per year is deemed the optimum sustainable harvesting level. The active public discussion about the sustainable volume of the use of forest resources, which started in 2016, continued in 2017. This topic is likely to be one of the main issues in the preparation of the forestry development plan for the next decade.

Felling volume and increment, 2000–2017



^a Based on comparison of clear cutting notifications and satellite images

Source: Estonian Environment Agency, National Forest Inventory and expert estimate of felling volumes

Establishing a new forest generation is an important measure in silviculture. In 2017, the State Forest Management Centre (SFMC) planted 7,141 hectares and sowed 311 hectares of forest. SFMC planted 21.1 million tree seedlings, 2.5 million of them in reforestation areas of previous years. Works to contribute to natural forest regeneration were carried out on 2,121 hectares by the SFMC. The area of maintenance of young stands has increased as well. While in 2010 the SFMC performed cleaning on 14,066 hectares, in the last four years it has been around 19,000 hectares. Since 2014, no official data are collected on reforestation in private forests; however, indirect data show an increase in reforestation there as well. According to expert assessments of the Environmental Board of Estonia, 6,000 hectares of private forests were planted and 600 hectares sowed in 2017. The main obstacle for increased reforestation in private forests is the lack of planting material.

The reasons why forests perish can be figured out based on the area of forests designated for regeneration cutting on the basis of forest protection expert assessments carried out by forest specialists of the Environmental Board. The main reasons for the perishing are damage caused by wild animals (38% of all dead stands registered in 2017), storm damage (30%) and diseases (20%, including especially root rot and stem rot).

PRODUCTION OF ELECTRICITY FROM RENEWABLE SOURCES IS INCREASINGLY IMPORTANT

Helle Truuts

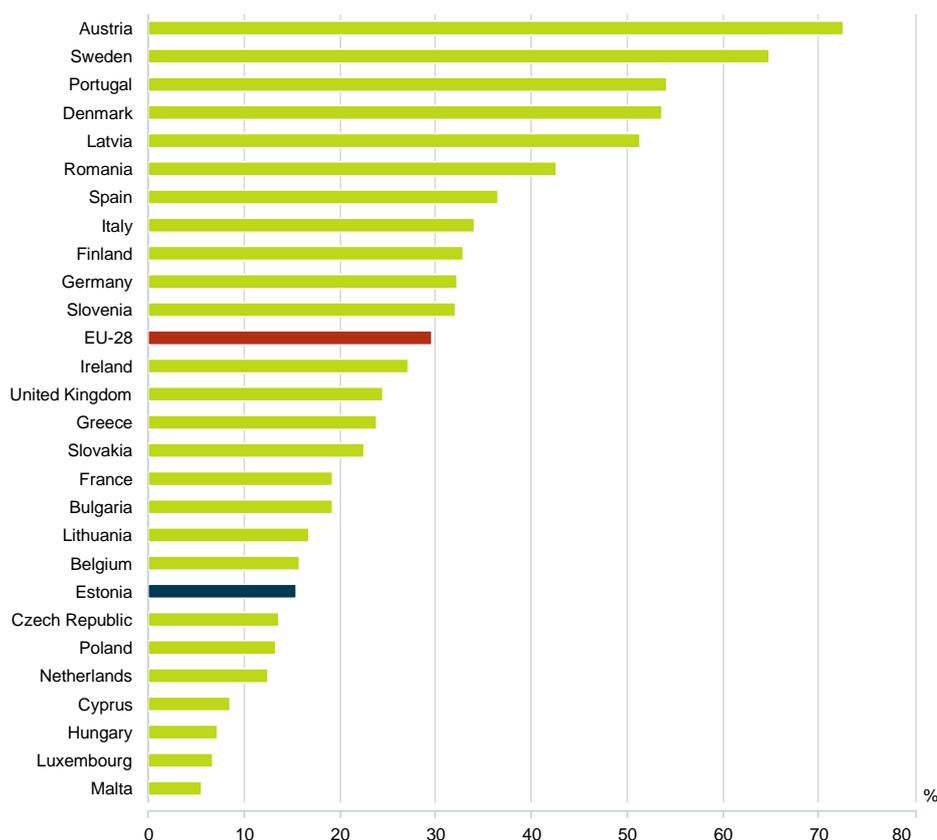
Total production of electricity in Estonia has been increasing for two years in succession and the share of imported electricity has decreased. The use of renewable energy sources has been increasing in Estonia year by year, in both electricity production and final consumption.

In 2017, electricity production in Estonia totalled 13 terawatt-hours, which is 8% more than the year before. The share of electricity imports in energy supply, at the same time, decreased by nearly a half compared to the previous year. Although electricity exports also decreased approximately 10% year on year, electricity production was still bigger than consumption, or the electricity balance showed a surplus. The domestic consumption of electricity has been stable during the past five years and increased 1% in 2017 compared to the previous year.

Although the production of electricity in Estonia is based mainly on oil shale – approximately 90% of electricity is produced from oil shale, the production of electricity from renewable sources has increased rapidly in recent years, which has somewhat lowered the share of oil shale.

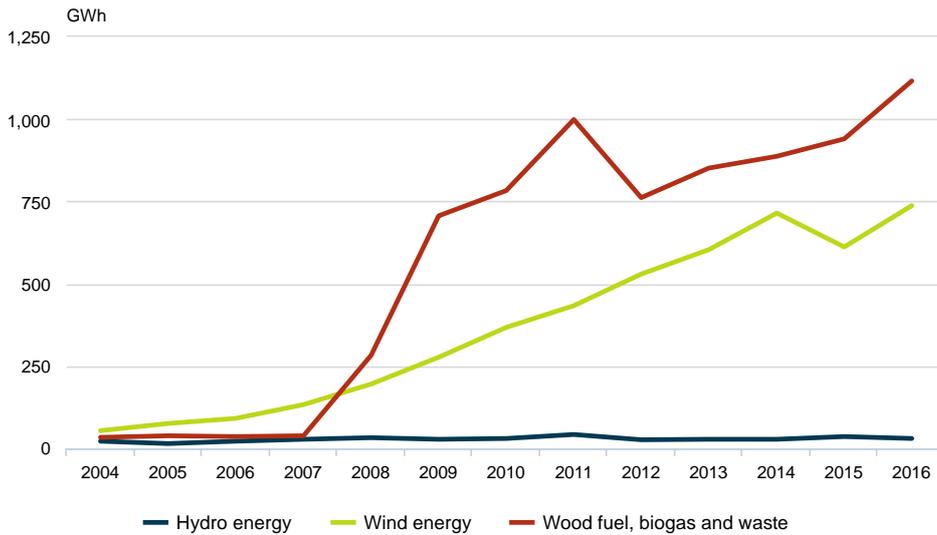
In 2010, 10.4% of electricity was produced from renewable energy sources in Estonia, in 2017, nearly twice as much – 18%. In comparison with other countries, this indicator was 15.5% in Estonia in 2016, which is approximately half of the European Union average. The consumption of renewable energy sources largely depends on natural conditions. Due to the available hydro energy, the neighbouring country Latvia produced approximately a half (51.3%), and Finland, with its wood fuel, approximately one third (32.9%) of electricity from renewable sources.

Share of electricity generated from renewable sources, 2016



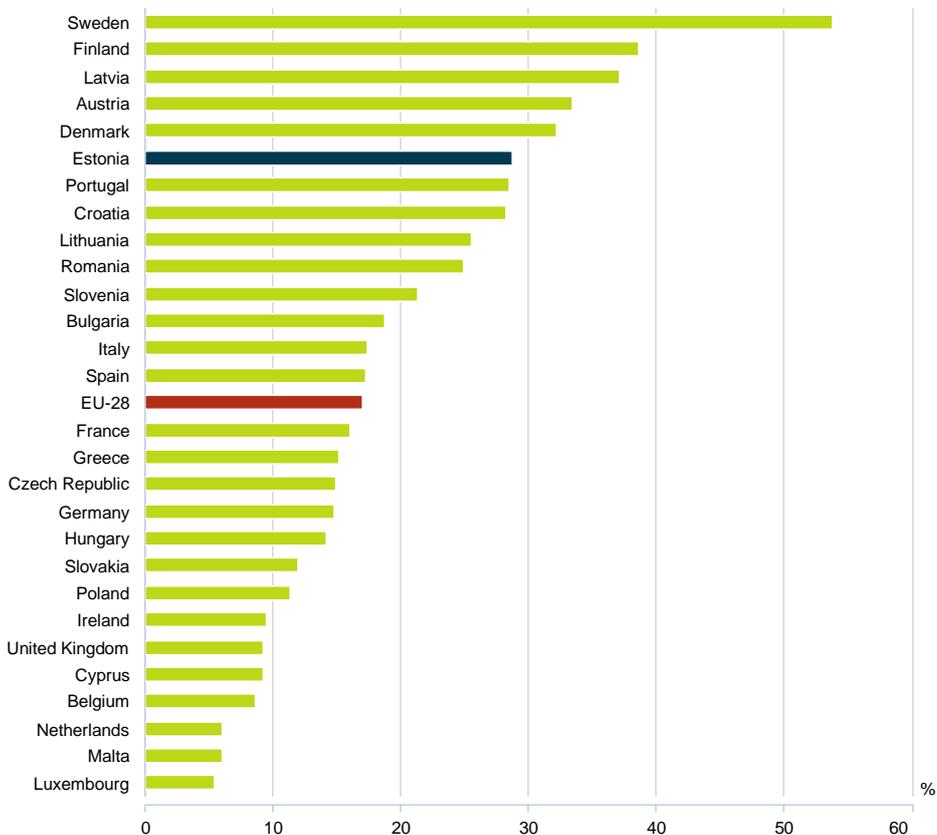
Source: Eurostat

Renewable electricity production in Estonia is based on wood, waste, wind, biogas and hydro energy. The biggest is the share of wind energy (40%). In 2017, wind energy production increased by 20% compared to 2016. The production of electricity from wood fuel has also increased. Although biogas and waste have been used increasingly more in power plants in recent years, their shares are small.

Production of electricity from renewable sources, 2005–2017


Source: Statistics Estonia

The use of renewable energy sources in the EU is seen as a key element in energy policy, reducing the dependence on fuel imported from non-EU countries, reducing emissions of carbon dioxide, and decoupling energy costs from oil prices. In addition to the production of electricity from renewable sources, the use of renewable sources is monitored also in energy consumption. In 2016, the highest share of renewable sources in final energy consumption was in Sweden (53.8%), Finland (38.7%) and Latvia (37.2%). In Estonia, this share was 28.8%, which is approximately twice as high as in EU on average (17%). The share of renewable energy in final consumption in Estonia has been increasing continuously since 2006. In 2006, the share was 16.1%, in 2010, it was 24.6%, and in 2016, it was as high as 28.8%. The National Development Plan of the Energy Sector until 2030 provides that the share of energy generated from renewable sources should be increased to 50% in final consumption.

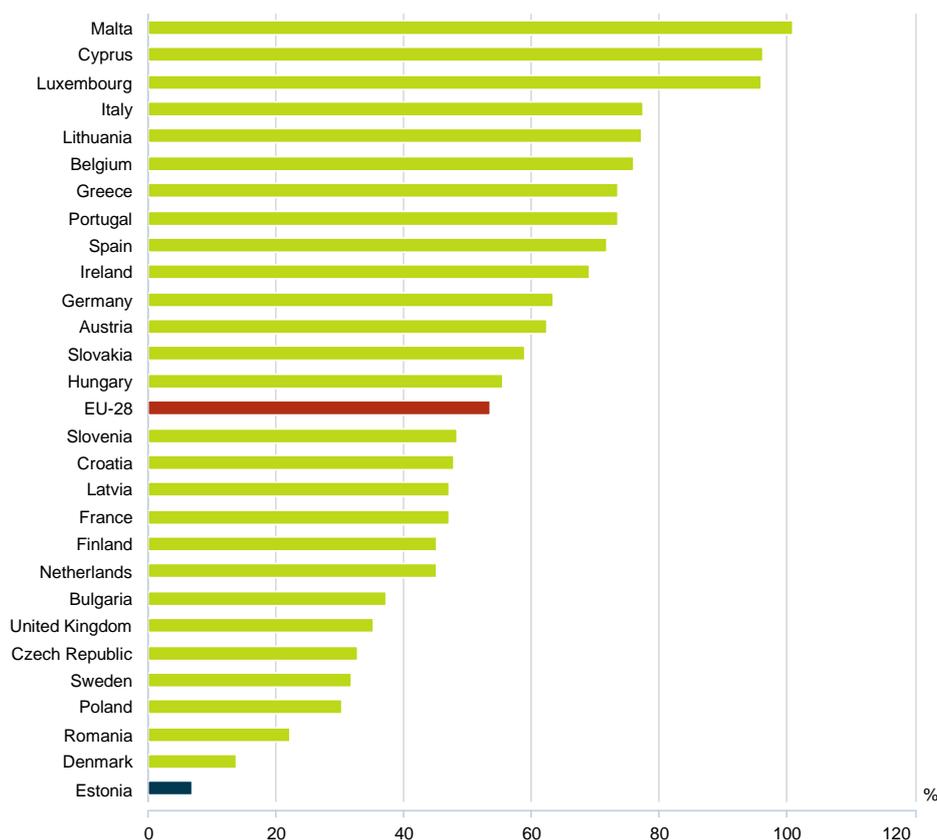
Share of renewable energy in gross final energy consumption in the European Union Member States, 2016


Source: Eurostat

Although most of the oil shale is used in power plants, it is also used as raw material for shale oil. Shale oil production, which has increased year by year, has contributed to the growth of oil shale consumption in the oil industry. 960,000 tonnes of shale oil were produced in 2017, which is a third more than the year before, and approximately 90% of the output was exported.

The relatively large amounts of domestic energy sources available in Estonia reduce considerably the share of imported energy in satisfying energy demand, or the energy dependency rate. The indicator is calculated as net energy imports divided by gross inland energy consumption. In 2016, the energy dependency rate in Estonia was 6.8%, indicating that Estonia is the least dependent on imported fuels in comparison with other EU Member States. The imports of the main energy products continued to decrease further in 2017. Motor gasoline was imported 6.2%, natural gas 5% and diesel fuel 2% less than in the previous year.

Energy dependency rate in the European Union, 2016



Source: Eurostat

THE NUMBER OF REGISTERED VEHICLES CONTINUES TO INCREASE

Meila Kivisild

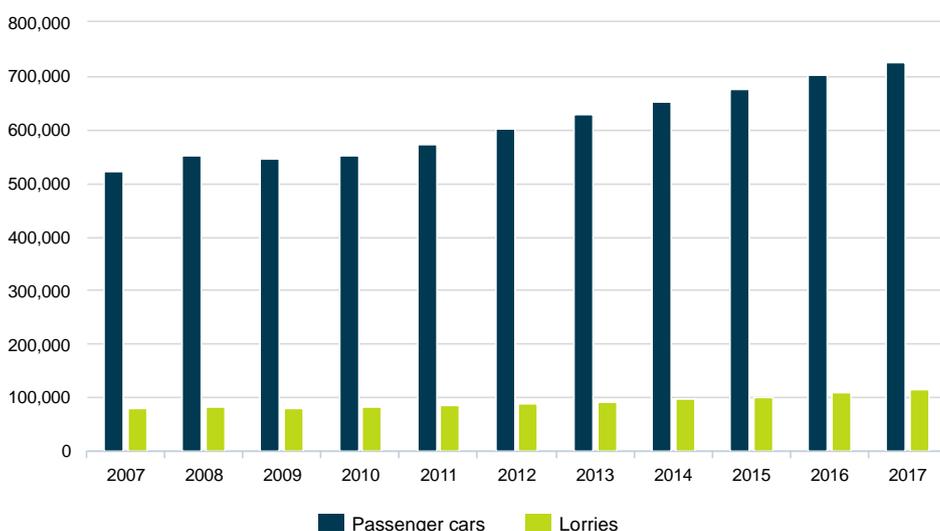
In 2017, the number of vehicles in the traffic register of the Estonian Road Administration continued to increase. The number of passengers and freight volume increased in maritime, rail and air transport but decreased in road transport. Passenger traffic via airports and ports reached yet another record level. The number of persons killed or injured in traffic accidents declined compared to the previous year.

The road network is the most important part of the transportation system, where public use roads are divided into national roads, local roads and forest roads. The length of the road network has not changed significantly over the past year. At the end of 2017, there were 16,605 km of national roads in Estonia, of which 4,015 km were main and basic roads and 12,481 km were secondary roads. The total length of Estonian railways is 2,141 km, of which 916 km are running tracks of public railway; 132 km of railways are electrified.

At the end of 2017, there were 725,944 passenger cars, 114,780 lorries, 4,964 buses, 32,978 motorcycles and 18,713 mopeds registered in the traffic register of the Estonian Road Administration – the number of all types of vehicles increased compared to the previous year. The number of tractors and mobile machinery also grew year on year.

In 2017, the number of first registrations of passenger cars in Estonia amounted to 49,396, which is more than in 2016. The main reason for the increase was the registration of new passenger cars: 25,625 new passenger cars were registered in 2017, i.e. over 2,500 more than in the previous year. 9,980 lorries and 6,900 trailers, nearly 2,000 motorcycles and slightly over 1,300 mopeds were registered for the first time. In 2017, there were 551 passenger cars per 1,000 inhabitants in Estonia (534 in 2016). There were 281 locomotives, 19 electric railcars, 49 diesel railcars, 274 passenger wagons and 21,835 freight wagons registered in the Estonian railway traffic register at the end of 2017. The Estonian ship register listed 112 sea craft and 9 bareboat chartered ships at the end of 2017. Inland waterway vessels numbered 29. At the end of 2017, the Estonian civil aircraft register included 178 aircraft.

Registered passenger cars and lorries, 2007–2017



Source: Statistics Estonia

To estimate the volume of passenger transport, the total number of passengers carried and passenger traffic volume are used. Passenger traffic volume is the volume of work done in the transport of passengers, measured in passenger-kilometres. In 2017, the number of passengers carried by Estonian transport enterprises amounted to 208.3 million, of which 91% were carried by road, 5% by sea, 4% by rail and 0.5% by air. Passengers in road transport (incl. trams and trolley buses) amounted to approximately as much as in 2016, but the number of passengers carried by sea, rail and air increased.

Bus transport enterprises served 190.4 million passengers in 2017, of which 87%, or approximately 165.4 million passengers used urban transport (incl. trams and trolleybuses). Urban transport was used almost as much as in 2016. The number of passengers was approximately 14.9 million on county lines, 4.1 million on domestic long-distance lines and approximately 1.4 million on international lines. In 2017, the passenger traffic volume of road transport was approximately 2.9 billion passenger-kilometres, having decreased in domestic traffic by 6% and increased in international bus transport by 7%.

In 2017, Estonian sea transport enterprises carried 9.4 million passengers, which is 3% more than in 2016. The number of passengers carried in domestic sea traffic was 2.5 million (up by 7%) and roughly 7 million (up by 2%) in international sea

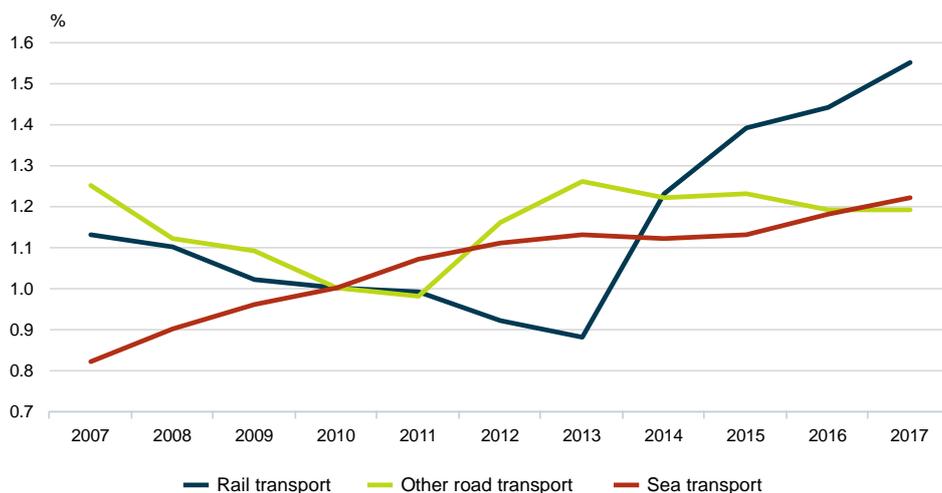
traffic. The passenger traffic volume of sea transport enterprises increased by 13% year on year and was approximately 1.3 billion passenger-kilometres in 2017. International sea traffic contributed 98% of the passenger traffic volume.

Last year, 7.4 million passengers were carried by rail, which is 7% more than in 2016. In domestic rail traffic, 7.3 million passengers were carried (up by 7%) and 107,400 passengers were carried in international rail traffic (up by 4%). The passenger traffic volume of rail transport enterprises increased by 16% year on year, totalling 366.7 million passenger-kilometres in 2017.

In 2017, Estonian air transport enterprises carried 946,700 passengers, of which 61% were carried on regular flights. Compared to 2016, the number of passengers increased by as much as 66%. A significant increase was recorded in the number of clients of Estonia's most important air transport enterprise. The passenger traffic volume of air transport enterprises increased by 38% year on year, and was approximately 1.3 billion passenger-kilometres in 2017.

Change in number of passengers, 2007–2017

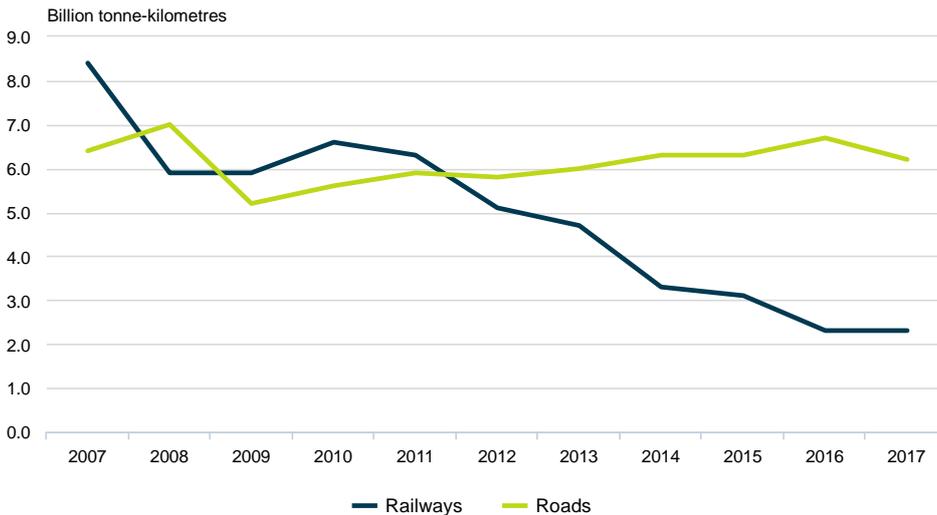
(2010 = 100%)



Source: Statistics Estonia

To measure the transport of goods, the amount of goods in tonnes and freight turnover in tonne-kilometres are used. According to preliminary estimates, in 2017, Estonian road freight vehicles and rail, sea and air transport enterprises carried a total of 56.4 million tonnes of goods, of which more than a half was carried by road and nearly a half by rail. Estonian road freight vehicles carried approximately 29 million tonnes of goods in 2017, which is 16% less than in 2016. The freight volume in road transport fell mainly in the second half of the year. 23 million tonnes of goods were transported in domestic road traffic (down by 17%) and approximately 6 million tonnes in international traffic (down by 14%). The freight turnover of Estonian road transport vehicles decreased by 8% compared to 2016, and totalled 6.2 billion tonne-kilometres. In 2017, the volume of goods carried by rail was 7% larger than the year before, amounting to 27.3 million tonnes. 18.1 million tonnes of goods were transported in domestic rail traffic (up by 15%), with the majority contributed by oil shale transport. 9.2 million tonnes of goods were transported in international traffic – 5% less than in 2016. Freight turnover of rail transport decreased by 1% year on year and amounted to 2.3 billion tonne-kilometres. Transportation of goods in transit account for most of international freight transport (7.6 million tonnes), which decreased mainly due to a decrease in the carriage of liquid refined petroleum products. Less import goods were carried compared to 2016 and nearly a quarter more export goods.

Freight volume in rail and road transport, 2007–2017



Source: Statistics Estonia

According to the data of Estonian Civil Aviation Administration, Estonian airports served over 2.7 million air passengers, which is 2% more than in 2016. Compared to 2016, cargo and mail services through airports decreased by nearly a fifth and amounted to over 11,300 tonnes. Cargo transport decreased by 23% and mail transport increased by 11%. The number of passengers passing through Tallinn Airport increased by 19% year on year and totalled over 2.6 million. 89% of passengers were travelling on scheduled flights.

In 2017, 10.9 million passengers visited Estonian ports by international transport – 3% more than in 2016. The growth was still mostly due to the increased number of passengers travelling on the shipping lines between Estonia and Finland. The number of passengers carried on these lines amounted to 9 million. 1.3 million passengers were carried between Estonia and Sweden, i.e. 7% more than the year before. 592,300 passengers arrived in Estonia by cruise ships – nearly a fifth more than a year earlier. Estonian ships carried 8 million passengers in international transport. Around 6,170 passenger ships (incl. ro-ro passenger ships) – 1% fewer than in 2016 – and 326 cruise ships (285 in 2016) called at Estonian ports from foreign countries. On international routes, nearly 2 million vehicles (excl. transit vehicles) were served by ports; 71% of the vehicles were passenger cars and 26% were lorries and trailers.

In 2017, Estonian ports handled 34.8 million tonnes of goods, which is 3% more than a year earlier. 4% more goods were loaded and 2% more were unloaded compared to 2016. 114 more freight ships arrived at Estonian ports from foreign countries than in 2016. The carriage of goods in transit through ports decreased by 1%, amounting to 17.9 million tonnes. 12.7 million tonnes of transit goods were loaded (up by 1%) and 5.1 million tonnes were unloaded (down by 5%). 10.7 million tonnes of goods were transported abroad through ports and 6.2 million tonnes of goods arrived at Estonian ports, which is respectively 9% and 10% more than in 2016. The transport of sea containers through ports increased by 13% year on year and was around 230,400 TEUs^a in 2017. Containers were shipped out of Estonia through ports in the amount of more than 111,900 TEUs and were received in the amount of nearly 118,500 TEUs.

The number of road traffic deaths was the smallest in ten years. According to the Estonian Road Administration's database of traffic accidents, in 2017, there were 1,406 road traffic accidents with casualties (182 traffic accidents with the participation of drunk drivers), in which 48 persons were killed and 1,725 injured. The number of persons killed decreased by 23 and the number of persons injured decreased by 121 compared to the previous year. Drunk drivers caused 13 fatal road traffic accidents, which is more than the year before. According to Technical Regulatory Authority, in 2017, there were 22 rail traffic accidents in Estonia (railway crossing crashes and train-pedestrian collisions), in which 13 persons were killed. In 2017, there were 6 serious ship incidents registered in the territorial and inland waters of Estonia; no one was killed in these accidents. 1 aircraft accident occurred on the territory of Estonia according to Civil Aviation Administration, where 2 persons were killed.

^a TEU (twenty-foot equivalent unit) – the standard unit for counting containers of various capacities and for describing the capacities of container ships or terminals. One twenty-foot ISO container equals 1 TEU.

THE USE OF MOBILE INTERNET HAS INCREASED

Tiina Pärson, Jaanika Ait

The use of mobile internet has increased year by year – compared to 2014 when slightly over a half of households with internet connection used mobile internet, by 2017, this share had risen to 82%. The internet is also widely used by enterprises – in 2017, 96% of enterprises with at least 10 employees used computers every day and as much as 95% also used the internet.

In the last three months, 88% of 16–74-year-old residents of Estonia used the internet – compared to the previous year, this share increased by 1 percentage point. The use of mobile internet has increased year by year – while in 2014, slightly over a half (51%) of the households with internet connection had mobile internet, by 2017, this indicator had increased to 82%.

Of all internet users, 90% used the internet and 85% used computers daily, indicating that besides computers, internet users have started using the internet also on other devices such as smart phones, smart TVs, etc. When on the move (i.e. away from home and workplace), 73% of internet users used the internet on their mobile or smart phone and 32% used it on a portable computer in the last three months – compared to 2016, these indicators have increased by 7 and 3 percentage points, respectively.

In 2017, the most popular areas of use were online banking services, reading media publications, and e-mail services. At least 9 out of 10 internet users had used the internet for these purposes in the last three months. In recent years, the offering and use of services of the sharing economy have become increasingly popular, the best-known applications of which are transport and accommodation. Within the previous 12 months, 22% of Estonian internet users booked a transport service from a private person via a website or a mobile app (e.g. Taxify, Uber) and 17% booked an accommodation (e.g. via Airbnb.com).

58% of 16–74-year-old residents of Estonia ordered products or services over the internet, i.e. 2 percentage points more than in 2016. Travel and accommodation services were purchased most of all (by 61% of e-commerce users), followed by tickets to concerts, cinema, theatre and other events (by 57%).

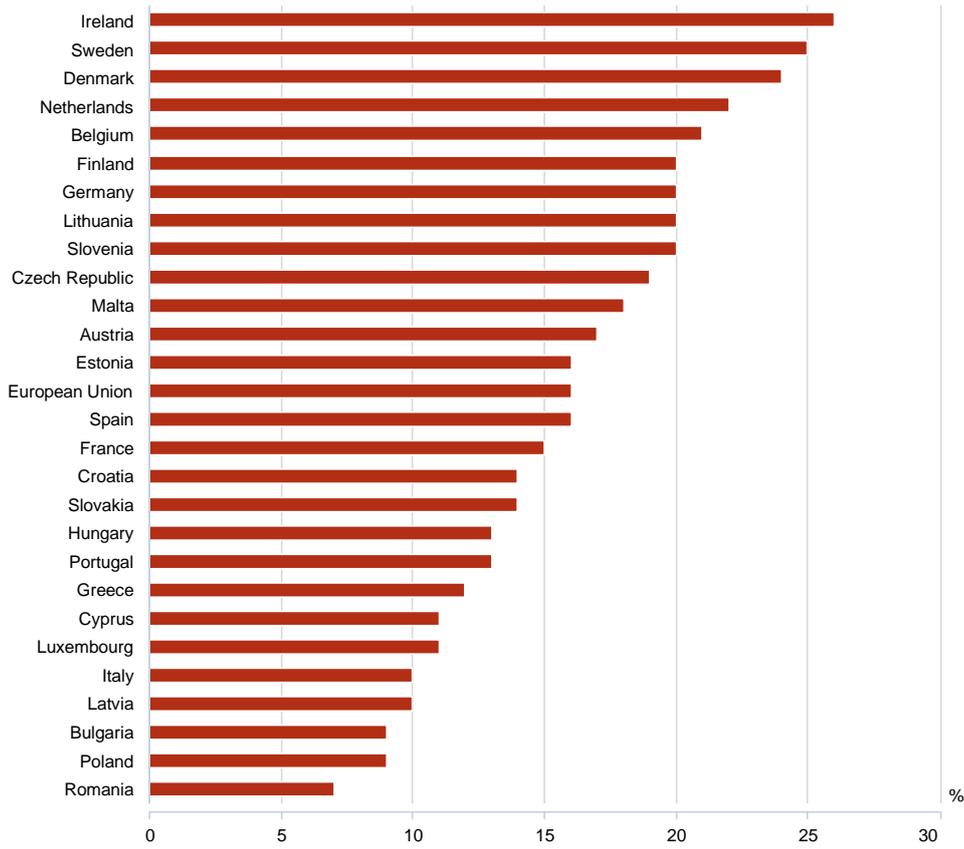
Products or services were mainly ordered from Estonian sellers (by 85% of e-commerce users) and sellers from other European Union countries (by 45%). The share of orders from outside the EU (e.g. China, USA, Russia) was largest among 16–24-year-old users of e-commerce (14 percentage point difference from the average). The items that were ordered the most from foreign sellers (from countries in and outside the EU) were consumer goods (by 48% of e-commerce users) and travel, accommodation, transport and similar services (by 23% of e-commerce users). When ordering products over the internet, slightly more than a quarter (29%) of e-commerce users encountered at least one problem (e.g. late delivery, difficulties in exchanging/returning products).

In 2017, 96% of enterprises with at least 10 employees used computers every day, and 95% of them also used the internet. Mainly fixed internet connection was used, however, approximately three quarters of enterprises also used mobile internet for work-related purposes. The speeds of fixed internet connections have continuously increased over the years. 80% of the enterprises with fixed internet connection had fastest downloading speed of over 10 Mbit/s. Compared to the previous year, the share of enterprises that used downloading speed of over 100 Mbit/s increased considerably. 97% of the enterprises using fixed internet connection were satisfied with their current connection.

Due to the development of smart technologies, more people are required who are digitally literate. In 2017, information and communications technology (ICT) specialists worked at 15% of Estonian enterprises. 8% of enterprises experienced difficulties in recruiting ICT specialists. Since the use of IT equipment is an inseparable part of everyday life, the continuous improvement of IT skills is inevitable. One tenth of Estonian enterprises trained their employees in the field of ICT, 8% organised training for ICT specialists working in the enterprise.

In regard to selling goods and services over the internet, Estonia ranks in the middle of the EU countries. In 2016, 16% of Estonian enterprises sold their products (goods or services) via websites or apps. The products were primarily sold in the local market. 7% of the enterprises who sold their products via websites or apps sold them in the EU countries, 3% sold them outside the EU.

Share of enterprises selling via websites or apps, 2016



Source: Eurostat

RECORD YEAR IN TOURISM LAST YEAR

Helga Laurmaa

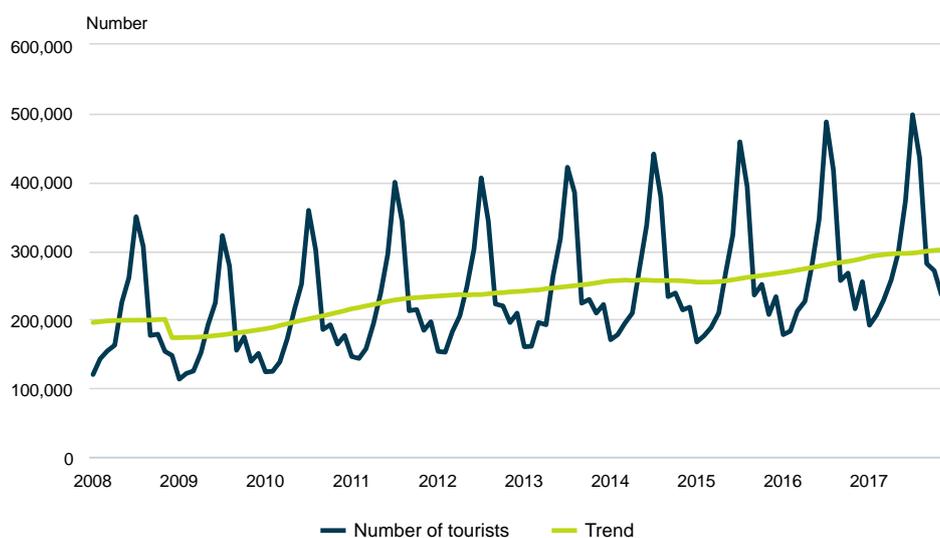
2017 was a record year in world tourism. More foreign tourists visited Estonia than in any of the previous years. 3.5 million domestic and foreign tourists stayed in Estonian accommodation establishments. There were 7% more tourists in accommodation establishments than a year earlier, including 9% more domestic tourists and 5% more foreign tourists. Of those staying in accommodation establishments, by country of residence, the number of Estonian residents increased the most, and of foreign tourists, more tourists arrived from Russia and Latvia. The total number of domestic and foreign tourists who stayed in accommodation establishments set a new record already for the eighth consecutive year.

According to the data of United Nations World Tourism Organization (UNWTO), 1.3 billion overnight trips were made in the world in 2017. The number of foreign travels increased by 83 million, or 7%. The number of overnight trips increased the most in Europe – by more than 8%, amounting to 671 million. More trips were made also to other world regions, which in total resulted in a record growth in the world.

According to the data of Eesti Pank (central bank of Estonia), Estonia's revenue from tourism (tourism services exports) was 1.9 billion euros, of which 1.4 billion euros was spent by foreign tourists in Estonia, to which payments made by residents of foreign countries to Estonian transport enterprises were added. Revenue from inbound tourism increased compared to the previous year by 10%.

In 2017, more than 6 million foreign tourists visited Estonia, i.e. 3% more than in 2016. Nearly a half of foreign tourists stayed for only a day in Estonia. Compared to 2016, the number of same-day visitors as well as the number of overnight visitors increased. 35% of all those who visited Estonia used the services of accommodation establishments. The rest of the tourists stayed in Estonia for only a day, were accommodated by relatives or friends or had found some other overnight accommodation.

Accommodated tourists, 2008–2017



Source: Statistics Estonia

3.5 million tourists stayed in Estonian accommodation establishments in 2017. This was 7% more than in 2016. Tourists spent a total of 6.5 million nights in Estonian accommodation establishments. The number of nights spent usually exceeds the number of accommodated tourists, as one accommodated tourist can spend more than one night in an accommodation establishment. The number of nights spent in accommodation establishments increased by 5% year on year. A year-on-year increase occurred also in the accommodation establishments of our neighbouring countries, increasing by 17% in Finland, 12% in Latvia and 5% in Lithuania.

The first time that the number of foreign visitors in Estonian accommodation establishments exceeded two million was in 2016. In 2017, 2.2 million foreign tourists stayed in Estonian accommodation establishments – 5% more than the year before. In total, foreign tourists spent more than 4 million nights in Estonian accommodation establishments, which is also a record result. One of the targets set in the Estonian National Tourism Development Plan 2014–2020 is that by 2020, foreign tourists spend 5 million nights in accommodation establishments. In 2018–2020, the number of overnight stays should increase by a fifth. In 2017, the number of nights spent in accommodation establishments by foreign tourists increased by 3%. More foreign tourists spend their nights in Estonian accommodation establishments than domestic tourists. In 2017, nights spent by foreign tourists accounted for 64% of the total number of overnight stays. This result is similar to that of Latvia (69%). In Finland,

however, foreign tourists account for a much smaller share of nights spent (31%). In the EU, overnight visits of foreign tourists amount to an average of 49% of the total number of overnight stays, which means that there are slightly more domestic tourists than foreign tourists staying in accommodation establishments. The reasons for the trips of foreign tourists staying in Estonian accommodation establishments have been stable in recent years: slightly more than 70% of foreign tourists are on a holiday and a fifth are on a business trip. In the summer months, there are more of those who are on a holiday trip, but outside the tourist season, the share of those on a business trip increases as the number of those on a holiday trip decreases.

The main tourism partners for Estonia are the neighbouring countries. The three most important tourism partners are Finland, Russia and Latvia. 1.3 million accommodated tourists came from these countries. Estonia has for years been the most popular travel destination for Finns. According to Statistics Finland, 1.7 million overnight trips were made by Finnish residents to Estonia in 2017, which accounted for more than a fifth of all overnight trips made by Finnish residents abroad. In 2017, the number of overnight trips made by Finnish tourists to Estonia decreased by 3%. In 2016, Finland's economic outlook was more modest and, therefore, the share of trips taken by Finnish residents to the neighbouring countries increased. In 2017, the share of trips to more distant countries increased again. After domestic tourists, Finnish tourists continue to be the most numerous group of customers in Estonian accommodation establishments. In 2017, 42% of accommodated foreign tourists came from Finland. In 2017, a total of 916,000 Finnish tourists stayed overnight in Estonian accommodation establishments, where they spent 1.7 million nights. Both the number of Finnish tourists and the number of nights spent by them in Estonia decreased by 4% compared to the record level in 2016. The number of accommodated Finnish tourists increased in February, March and April and decreased in the remaining months.

The number of tourists from Russia has been fluctuating over the past decade – there have been significant increases as well as decreases. In 2015, the number of accommodated Russian tourists was a third smaller than the year before, but in the second half of 2016, the number of tourists started to increase again, and a large number of Russian tourists stayed in the accommodation establishments also in 2017. 239,000 Russian tourists stayed in Estonian accommodation establishments, i.e. nearly a fifth more than the year before. Compared to the record year of 2013, in terms of the number of visitors from Russia, 66,000 fewer Russian tourists were accommodated. Their share in the total number of accommodated foreign tourists was 11%, which is significantly less than in the record year (16%). They spent in Estonia 483,000 nights, which is 17% more than in 2016, but more than a third less than in 2013.

The third largest partner country for Estonian accommodation establishments is Latvia. The number of Latvian tourists has increased for many years. 7%, or 161,000 of the accommodated foreign tourists came from Latvia in 2017 – 14% more than in 2016. Both the number of tourists from Latvia and the number of nights spent by them (244, 000) set new records for the seventh consecutive year. For tourists from Latvia, there are attractive goods available in Estonia within a convenient driving distance. In terms of the number of tourists using Estonian accommodation establishments, Latvia was behind Sweden and Germany only a few years ago, but since 2015, the three neighbouring countries – Finland, Russia and Latvia – have been the main partner countries for accommodation establishments, accounting for 61% of the accommodated foreign tourists.

Germany and Scandinavian countries are also important tourism partners for Estonia. The share of German tourists in the total number of foreign tourists was 6%. The number of accommodated German tourists was 126,000 – as much as the year before. A total of 125,000 tourists came from Sweden, Norway and Denmark, constituting 6% of the total number of foreign tourists who used the services of Estonian accommodation establishments. Compared to 2016, less tourists arrived from Sweden and Norway, but the number of tourists from Denmark increased. Transport connections are very important in tourism and may affect the neighbouring countries; also competition is fierce. A ship added on the Riga–Stockholm route brought about an increase in the number of passengers on the route and affected the increase in the number of overnight stays by Swedish tourists in Latvian accommodation establishments. At the same time, the number of overnight stays by Swedish tourists in Estonian accommodation establishments decreased.

The number of tourists from Asian countries increased rapidly. 20,000 tourists arrived from China – a fifth more than in 2016. In 2017, tourists from Japan in accommodation establishments numbered 28,000. Estonian accommodation establishments have also benefited from the direct flights between Helsinki and Tokyo that started operating in the summer of 2013. There are three times more Japanese tourists staying in Estonian accommodation establishments than five years ago.

Domestic tourism continues to grow. 39% of the customers of accommodation establishments were domestic tourists. One of the targets set in the Estonian National Tourism Development Plan 2014–2020 is that Estonian residents choose to spend their holidays in Estonia, thus having a positive impact on the Estonian economy. In the past eight years, the number of domestic tourists and the number of nights spent by them in accommodation establishments have consistently increased. The new record is 1.4 million Estonian residents who used accommodation services, i.e. everyone living in Estonia stayed in an accommodation establishment more than once a year. Domestic tourists spent a total of 2.4 million nights in accommodation establishments, which means that each day there were on average 6,500 Estonian residents using the services of accommodation establishments. The number of domestic tourists increased by 9% compared to 2016, while the number of nights spent increased by 7%. This means that compared to the previous year, they spent somewhat less time on a domestic trip. The number of nights spent set as a target for 2020 in the tourism development plan was reached already in 2016.

In 2017, there were 1,500 accommodation establishments in Estonia, with 25,000 rooms and 62,000 bed places. There were 700 more rooms and 2,000 more bed places available for visitors compared to 2016. 21,000 rooms with 48,000 bed places were available all year round. Most of the rooms (67%) were double rooms. In 292 accommodation establishments, there were rooms available for people with limited mobility. More than 10,000 people were employed in accommodation establishments in Estonia in 2017. The revenue from the sales of accommodation services increased for the sixth consecutive year. In 2017, it amounted to 245 million euros – 12% more than a year earlier. As the revenue from the sales of

accommodation services grew more than the number of nights spent in accommodation establishments, tourists had to pay on average 3 euros more per night than the year before – 38 euros.

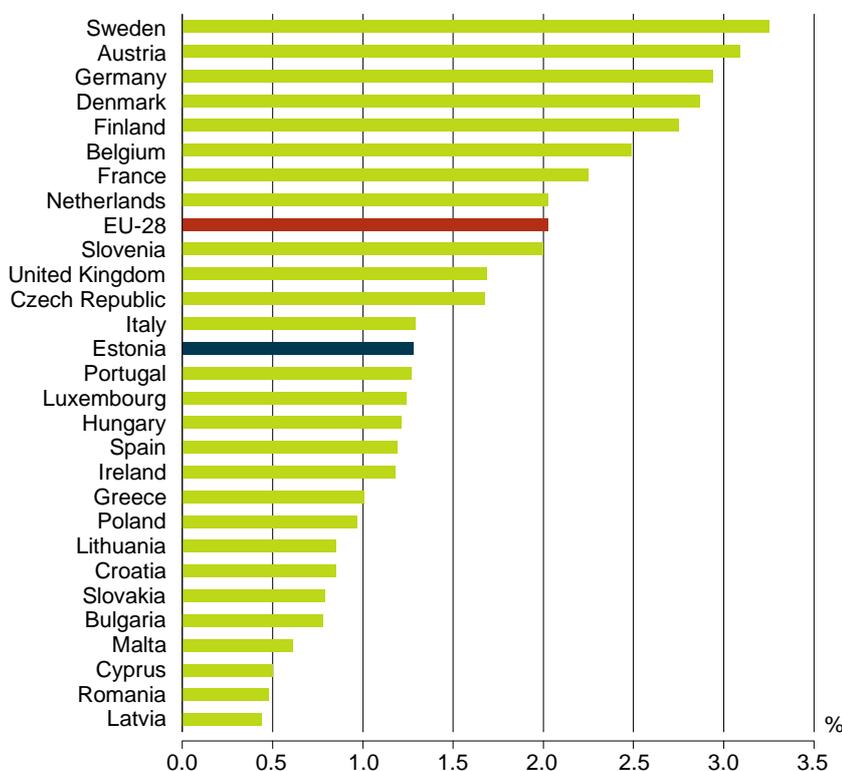
ESTONIA'S RESEARCH AND DEVELOPMENT INTENSITY IS AVERAGE AMONG THE EUROPEAN UNION MEMBER STATES

Rita Raudjärv, Tiina Pärson

Estonia's research and development intensity indicator was 1.28 in 2016, placing Estonia 13th in the ranking of the European Union countries. Estonia is significantly ahead of Lithuania and Latvia, but still lags far behind Finland.

R&D intensity, which measures the proportion of R&D expenditure in the country's gross domestic product, is regarded as an important indicator in country comparisons. The indicator is also one of the indicators of sustainable development. In 2016, R&D expenditure in Estonia amounted to 270.3 million euros. R&D is a very resource-intensive activity, which requires, in addition to own resources, strong support from the government. The government has been funding a substantial share of R&D spending. Of the funds allocated for R&D, state budget allocations constituted 49% in 2014 and 46% in 2015. The funds allocated from the state budget for R&D also include Structural Funds support, which is included in the state budget and is, therefore, considered government funding. In 2016, the government contribution decreased slightly compared to the previous years, falling to 37%. This was due to the fact that one of the Structural Funds funding periods had just ended, but the new one had not started yet.

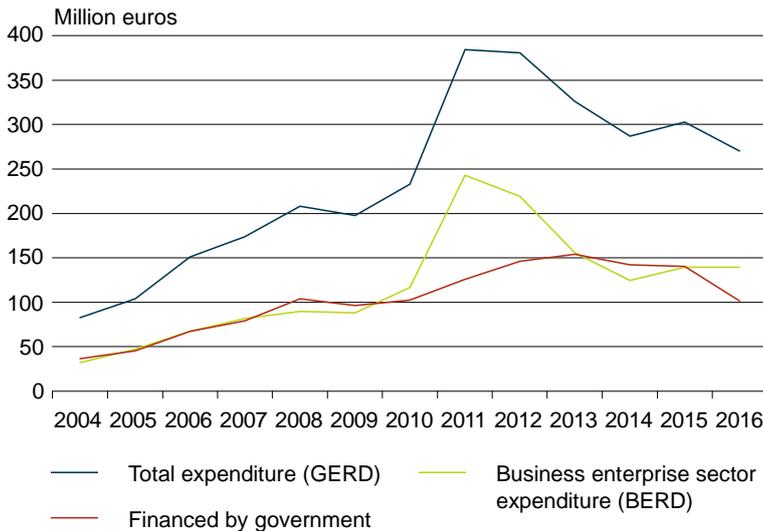
Ratio of research and development expenditure to GDP in the European Union, 2016



Source: Eurostat

The business enterprise sector is an important player in R&D. In 2016, the business enterprise sector contributed 139 million euros to R&D, which accounted for 52% of the total R&D expenditure. The share of R&D expenditure in the business enterprise sector has remained broadly unchanged over the last three years. 7 million euros were allocated from the state budget for the business enterprise sector R&D activities and 11 million euros came from foreign sources. 62% of the R&D expenditure in the business enterprise sector was labour costs. The share of investments in expenditure was 13%.

Expenditure on research and development, 2004–2016



Source: Statistics Estonia

R&D expenditure in the non-profit institutional sector (higher education, government and private non-profit sectors) amounted to 131 million euros in 2016, of which nearly three quarters was in the higher education sector. Of the non-profit institutional sector's R&D costs, 73% were financed by the government and 20% came from foreign sources. Similarly to the business enterprise sector, labour costs had the largest share (59%) in the non-profit institutional sector's R&D spending, the share of investments was 3%.

In 2016, the number of persons employed in R&D calculated in full-time equivalents was 5,772, of whom 68% worked in the non-profit sectors. The number of researchers and engineers calculated in full-time equivalents was 4,338, which is 3.6% more than in 2015. The increase in the number of full-time researchers and engineers was due to the business enterprise sector, where this figure increased 14% compared to 2015. In the non-profit institutional sectors, their number declined by 0.5% year on year.

In 2016, females accounted for 45% of the persons employed in R&D and for 41% of researchers and engineers. The share of female researchers was highest in the higher education sector – 55%. In both the government and business enterprise sector, the share of women was 21%.

The number of female researchers and engineers with doctoral degrees in the non-profit institutional sector was 55%, whereas 33% had a Master's degree in 2016. In the business enterprise sector, 9% of R&D staff had a doctoral degree and 35% had a Master's degree in 2016.

In 2016, there were 402 foreign researchers working in Estonia: 112 females and 290 males. The researchers came from 57 different countries. The most researchers were from Germany (50), Russia (37), Italy (27) and Finland (27).

(R&D) is a systematic activity based on the creative freedom of the individual, aiming at the acquisition of new knowledge about humans, nature and society and their interactions through scientific research. Its further aim is the application of the gained knowledge in the production of new materials, products and equipment and introduction or substantial improvement of processes, systems and services. R&D includes basic and applied research and experimental development, which may partially overlap.

MAIN INDICATORS, 2013–2018

Main indicators by year and quarter, 2013–2018

Period	Average monthly gross wages and salaries, euros ^a	Change of average monthly gross wages and salaries on same period of previous year, % ^a	Average monthly old-age pension, euros ^b	Employed ^c thousands	Unemployed ^c
2013	949	7.0	327.4	621.3	58.7
2014	1,005	5.9	345.1	624.8	49.6
2015	1,065	6.0	365.6	640.9	42.3
2016	1,146	7.6	386.0	644.6	46.7
2017	1,221	6.5	405.4	658.6	40.3
2013					
1st quarter	900	6.3	315.9	610.1	67.5
2nd quarter	976	8.5	331.3	632.1	55.0
3rd quarter	930	8.8	331.4	627.1	53.3
4th quarter	986	7.6	331.0	616.1	58.9
2014					
1st quarter	966	7.3	330.9	605.8	56.6
2nd quarter	1,023	4.8	349.9	629.5	47.7
3rd quarter	977	5.0	350.0	633.7	51.3
4th quarter	1,039	5.3	349.6	630.3	42.7
2015					
1st quarter	1,010	4.5	349.5	623.1	44.2
2nd quarter	1,082	5.8	371.3	640.1	44.4
3rd quarter	1,045	6.9	370.9	661.0	36.5
4th quarter	1,105	6.4	370.7	639.4	43.9
2016					
1st quarter	1,091	8.1	370.6	630.0	43.6
2nd quarter	1,163	7.6	391.4	657.0	45.3
3rd quarter	1,119	7.1	390.2	653.3	52.9
4th quarter	1,182	7.0	390.3	638.2	45.1
2017					
1st quarter	1,153	5.7	390.7	646.8	38.4
2nd quarter	1,242	6.8	409.9	653.5	49.0
3rd quarter	1,201	7.4	409.1	666.6	36.5
4th quarter	1,271	7.5	409.3	667.4	37.2
2018					
1st quarter	1,242	7.7	417.4	650.5	47.4

^a Since 1999, the average monthly gross wages and salaries do not include health insurance benefits.

^b Data of the Social Insurance Board.

^c Population aged 15–74.

Main indicators by year and quarter, 2013–2018

Labour force participation rate ^a	Employment rate ^a	Unemployment rate ^a	Consumer price index	Producer price index of industrial output	Period
	%		change on same period of previous year, %		
68.0	62.1	8.6	2.8	4.1	2013
68.0	63.0	7.4	-0.1	-1.6	2014
69.4	65.2	6.2	-0.5	-2.0	2015
70.4	65.6	6.8	0.1	-0.7	2016
71.6	67.5	5.8	3.4	3.6	2017
					2013
67.7	61.0	10.0	3.5	4.6	1st quarter
68.7	63.2	8.0	3.4	4.7	2nd quarter
68.0	62.7	7.8	2.8	3.9	3rd quarter
67.5	61.6	8.7	1.5	3.3	4th quarter
					2014
66.8	61.1	8.5	0.6	-1.2	1st quarter
68.3	63.5	7.0	0.0	-2.0	2nd quarter
69.1	63.9	7.5	-0.6	-1.1	3rd quarter
67.9	63.6	6.3	-0.5	-2.0	4th quarter
					2015
67.8	63.3	6.6	-0.9	-1.6	1st quarter
69.6	65.1	6.5	0.0	-1.7	2nd quarter
70.9	67.2	5.2	-0.5	-2.7	3rd quarter
69.5	65.0	6.4	-0.5	-2.1	4th quarter
					2016
68.6	64.1	6.5	-0.4	-1.4	1st quarter
71.5	66.9	6.5	-0.7	-1.6	2nd quarter
71.9	66.5	7.5	0.4	-1.1	3rd quarter
69.6	65.0	6.6	1.3	1.5	4th quarter
					2017
70.2	66.3	5.6	3.0	2.8	1st quarter
72.0	66.9	7.0	3.1	3.7	2nd quarter
72.0	68.3	5.2	3.7	4.4	3rd quarter
72.2	68.4	5.3	3.8	3.2	4th quarter
					2018
71.4	66.6	6.8	3.1	3.0	1st quarter

^a Population aged 15–74.

Main indicators by year and quarter, 2013–2018

Period	Volume index of industrial production ^a	Volume index of electricity production ^a	Export price index	Import price index	Construction price index	Construction volume index ^b
change on same period of previous year, %						
2013	4.1	10.9	-1.1	-1.6	5.2	-0.1
2014	3.9	-6.3	-2.6	-2.2	0.5	-2.1
2015	0.3	-16.6	-3.9	-3.8	0.5	-4.5
2016	3.4	18.3	-0.5	-2.3	-0.8	4.6
2017	7.7	13.2	5.5	4.5	1.5	17.7
2013						
1st quarter	3.8	21.7	-0.8	-0.1	5.6	0.8
2nd quarter	5.4	16.0	-0.9	-2.6	5.2	-0.4
3rd quarter	5.1	14.7	-1.2	-2.1	5.3	3.6
4th quarter	2.1	-4.7	-1.7	-1.5	4.7	-4.7
2014						
1st quarter	1.6	-19.2	-2.3	-2.4	2.3	-2.9
2nd quarter	2.6	-2.4	-2.2	-1.7	0.8	-3.5
3rd quarter	4.8	-7.0	-2.2	-1.1	-0.2	-7.4
4th quarter	6.7	2.7	-3.7	-3.6	-0.7	6.5
2015						
1st quarter	3.5	-0.3	-4.3	-4.7	0.1	-1.2
2nd quarter	1.3	-23.4	-3.3	-1.9	0.7	-4.2
3rd quarter	-1.2	-22.1	-4.5	-4.3	0.6	-2.7
4th quarter	-2.2	-20.5	-3.6	-4.2	0.7	-5.0
2016						
1st quarter	-1.4	-5.6	-3.0	-4.0	-0.7	5.3
2nd quarter	0.9	4.1	-2.4	-4.5	-1.3	6.3
3rd quarter	5.0	41.8	-0.1	-2.2	-0.7	2.4
4th quarter	9.0	32.9	3.6	1.7	-0.5	4.9
2017						
1st quarter	12.7	31.0	6.7	6.6	0.7	20.3
2nd quarter	10.9	42.0	5.7	4.3	1.5	17.5
3rd quarter	3.5	-13.1	5.3	3.7	1.7	17.6
4th quarter	4.3	-7.0	4.2	3.3	2.1	16.4
2018						
1st quarter	3.9	-1.9	2.1	1.6	1.8	21.1

^a Short-term statistics. The data for 2017 may be revised.

^b Construction activities in Estonia and in foreign countries. The data for 2017 may be revised.

In the case of volume index of industrial production and construction volume index, statistics according to the Estonian Classification of Economic Activities (EMTAK 2008, based on NACE Rev. 2).

Main indicators by year and quarter, 2013–2018

Agricultural output price index	Agricultural input price index	Gross domestic product (GDP) by chain-linking method ^a	Balance of current account as percentage of GDP, % ^b	Net sales of enterprises, million euros, current prices ^c	Period
change on same period of previous year, %					
6.7	3.0	1.9	0.5	50,357.2	2013
-5.7	-2.3	2.9	0.3	50,328.6	2014
-13.0	-0.8	1.7	2.0	49,065.8	2015
-2.5	-1.9	2.1	1.9	50,194.5	2016
21.9	1.5	4.9	3.1	54,973.5	2017
2013					
12.9	5.5	3.1	-0.6	12,054.1	1st quarter
27.4	4.8	1.0	0.9	12,733.1	2nd quarter
14.5	2.2	1.6	0.1	12,808.7	3rd quarter
-12.4	-0.4	2.1	1.6	12,761.3	4th quarter
2014					
4.0	-2.7	1.8	-3.8	11,798.0	1st quarter
-4.5	-2.8	3.0	0.8	12,869.6	2nd quarter
-10.0	-2.1	2.5	0.7	12,666.7	3rd quarter
-9.8	-1.4	4.1	2.9	12,994.3	4th quarter
2015					
-23.4	-1.1	1.5	-1.5	11,531.1	1st quarter
-18.6	-0.4	2.3	3.9	12,475.7	2nd quarter
-8.9	1.0	2.1	3.2	12,359.5	3rd quarter
-4.1	-0.7	0.9	2.0	12,699.5	4th quarter
2016					
-3.3	-1.0	2.2	-2.2	11,726.0	1st quarter
-7.7	-2.4	0.9	2.5	12,651.7	2nd quarter
-5.3	-2.3	2.0	5.5	12,619.2	3rd quarter
3.0	-1.8	3.1	1.4	13,197.6	4th quarter
2017					
21.6	0.1	4.4	1.5	12,686.9	1st quarter
28.5	1.3	5.7	2.0	13,969.9	2nd quarter
28.8	2.2	4.2	4.6	13,823.8	3rd quarter
14.1	2.4	5.0	4.2	14,492.9	4th quarter
2018					
0.1	-0.5	3.6	-0.6	13,701.3	1st quarter

^a Reference year 2010.

^b Data of Eesti Pank. The data for the 4th quarter and annual data for 2017 have been revised.

^c Short-term statistics. Statistics according to the Estonian Classification of Economic Activities (EMTAK 2008, based on NACE Rev. 2).

Main indicators by year and quarter, 2013–2018

Period	Revenue of state budget ^a	Expenditure of state budget ^a	Surplus of state budget ^a	Exports ^b	Imports ^b	Balance of trade ^b
million euros, current prices						
2013	6,556.2	6,853.0	-296.9	12,288.2	13,902.5	-1,614.4
2014	6,677.5	6,488.4	189.1	12,006.0	13,788.1	-1,782.0
2015	6,792.7	7,157.3	-364.6	11,575.3	13,096.7	-1,521.4
2016	7,318.8	7,326.8	-8.0	11,892.0	13,521.7	-1,629.8
2017	9,309.4	9,242.1	67.2	12,861.0	14,733.7	-1,872.7
2013						
1st quarter	1,395.0	1,490.3	-95.3	3,098.1	3,405.8	-307.7
2nd quarter	1,862.9	1,593.7	269.2	3,173.3	3,611.9	-438.6
3rd quarter	1,697.3	1,763.3	-66.1	2,977.4	3,431.1	-453.7
4th quarter	1,601.0	2,005.7	-404.7	3,039.4	3,453.7	-414.3
2014						
1st quarter	1,565.0	1,506.8	58.2	2,837.8	3,276.0	-438.2
2nd quarter	1,730.4	1,537.0	193.4	3,005.3	3,492.8	-487.5
3rd quarter	1,591.6	1,546.6	45.0	3,042.7	3,470.4	-427.7
4th quarter	1,790.5	1,898.0	-107.5	3,120.3	3,549.0	-428.7
2015						
1st quarter	1,601.1	1,810.7	-209.6	2,832.7	3,187.3	-354.6
2nd quarter	1,739.1	1,692.6	46.5	2,990.6	3,339.9	-349.4
3rd quarter	1,676.3	1,709.8	-33.5	2,831.6	3,261.8	-430.3
4th quarter	1,776.2	1,944.2	-168.0	2,920.6	3,307.6	-387.2
2016						
1st quarter	1,850.6	1,874.8	-24.2	2,778.8	3,229.1	-450.5
2nd quarter	1,844.1	1,643.7	200.4	3,025.9	3,491.0	-465.0
3rd quarter	1,742.3	1,775.1	-32.8	3,017.8	3,319.5	-301.7
4th quarter	1,881.8	2,033.1	-151.3	3,069.5	3,482.2	-412.7
2017						
1st quarter	2,055.2	2,098.8	-43.6	3,090.0	3,742.3	-652.3
2nd quarter	2,328.8	2,287.7	41.1	3,259.5	3,711.1	-451.6
3rd quarter	2,191.1	2,173.6	17.5	3,162.0	3,519.4	-357.3
4th quarter	2,734.2	2,682.0	52.3	3,349.4	3,760.9	-411.5
2018						
1st quarter	2,198.3	2,268.8	-70.6	3,287.8	3,828.5	-540.6

^a Data of the Ministry of Finance. Since 2017, the accounting of state budget execution is accrual-based. Since 2017, the revenues and expenditures also include allocated tax revenues collected by the Tax and Customs Board.

^b Data for the current year are revised monthly; data for the previous years are revised twice a year.

Main indicators by year and quarter, 2013–2018

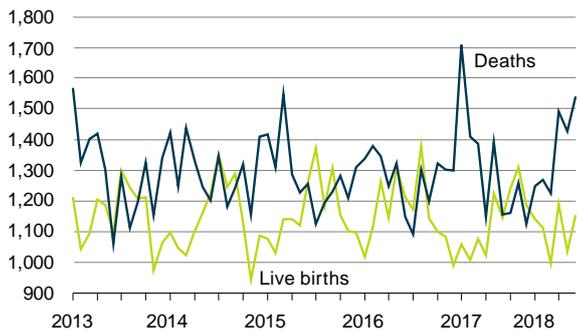
Carriage of goods, thousand tonnes ^a	Carriage of passengers, thousands ^a	Retail sales volume index ^b	Production of meat (live weight) ^c	Production of milk ^c	Production of eggs ^c	Period
78,726	216,040.5	6	1.4	7.0	5.8	2013
75,141	211,015.1	7	1.2	4.3	5.0	2014
66,219	213,990.2	8	3.1	-2.7	2.5	2015
65,354	207,531.7	6	-4.3	0.0	-2.6	2016
56,430	208,259.8	3	-9.2	1.1	1.8	2017
						2013
21,040	55,234.3	5	3.3	2.8	-0.9	1st quarter
19,463	53,601.1	6	0.0	6.9	-2.7	2nd quarter
18,749	53,297.5	5	1.7	8.7	18.1	3rd quarter
19,474	53,907.6	6	0.6	9.7	9.9	4th quarter
						2014
19,220	54,844.4	6	5.3	10.1	18.1	1st quarter
17,376	52,806.9	6	0.0	4.7	2.6	2nd quarter
18,559	51,113.9	7	0.0	4.2	-6.7	3rd quarter
19,986	52,249.9	7	-0.3	-1.4	7.4	4th quarter
						2015
18,063	57,669.1	9	2.7	-4.6	-8.6	1st quarter
15,958	54,095.2	7	4.9	-4.2	0.8	2nd quarter
15,954	50,425.1	8	-0.3	-2.9	6.5	3rd quarter
16,245	51,800.7	8	5.1	0.9	11.9	4th quarter
						2016
16,177	52,968.6	7	-7.8	4.0	15.1	1st quarter
15,352	53,418.5	7	-0.7	2.9	5.0	2nd quarter
16,763	49,779.6	4	0.0	-2.3	-10.7	3rd quarter
17,062	51,365.0	5	-8.3	-4.4	-17.1	4th quarter
						2017
13,831	53,889.4	5	-8.1	-1.7	-10.1	1st quarter
12,740	53,478.9	4	-9.2	-0.7	-1.2	2nd quarter
13,786	50,457.4	3	-12.4	1.7	10.8	3rd quarter
16,073	50,434.1	1	-7.0	5.4	10.3	4th quarter
						2018
15,547	50,720.2	1	4.6	2.6	10.3	1st quarter

^a Carriage data of Estonian transport enterprises. The data on carriage of goods for 2017 have been revised.

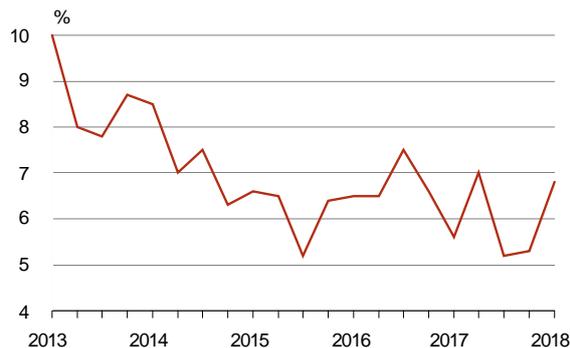
^b Short-term statistics. The data for 2017 may be revised. Statistics according to the Estonian Classification of Economic Activities (EMTAK 2008, based on NACE Rev. 2).

^c Preliminary data for 2017 and 2018.

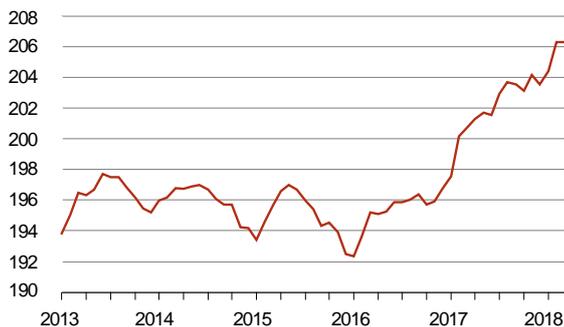
Natural change of population



Unemployment rate of population aged 15–74



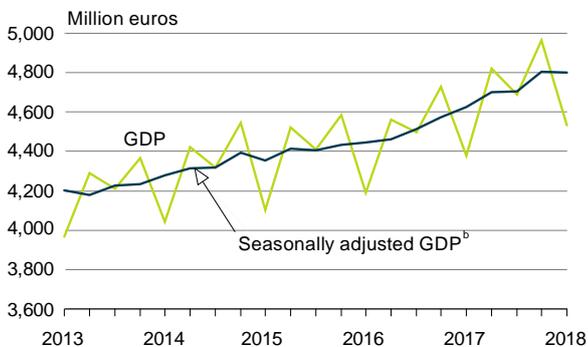
Consumer price index, 1997 = 100



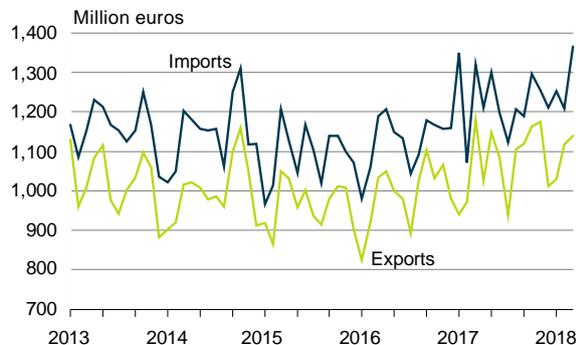
Producer price index of industrial output, 2010 = 100



Gross domestic product at chain-linked volume (reference year 2010)^a



Foreign trade



^a Values calculated by chain-linked index of reference year (values at reference year are multiplied by chain-linked index of the calculated period). Reference year is a conditional year for calculating chain-linked data and starting point of the series of chain-linked indices. Chain-linked index is a cumulative index for chain-linking sequential periods and it expresses the growth rate of a component compared to the reference year.

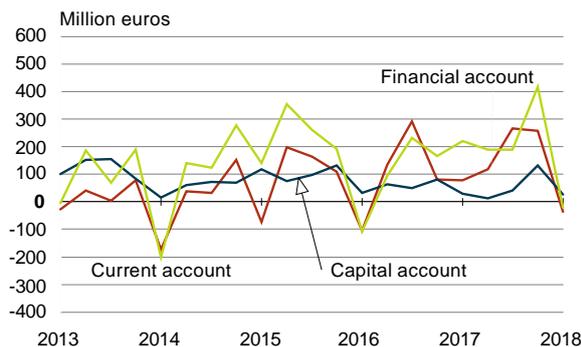
^b Seasonal adjustment of time series means identifying and eliminating regular within-a-year influences to highlight the underlying trends and short-run movements of economic processes. GDP is seasonally and working-day adjusted.

Average monthly exchange rate of the US dollar against the euro



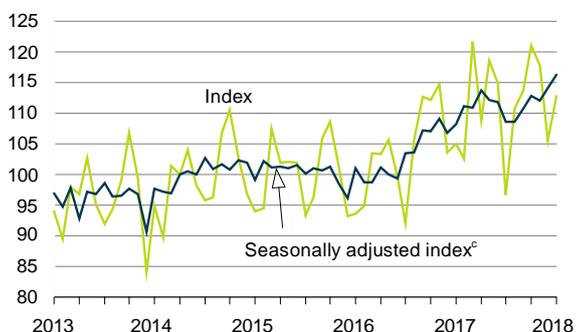
Source: European Central Bank

Balance of payments



Source: Eesti Pank

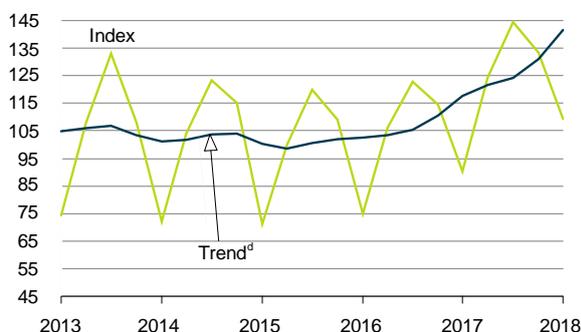
Volume index of industrial production, 2015 = 100^a



^a Statistics according to the Estonian Classification of Economic Activities (EMTAK 2008, based on NACE Rev. 2).

^c Seasonal adjustment of time series means identifying and eliminating regular within-a-year influences to highlight the underlying trends and short-run movements of economic processes.

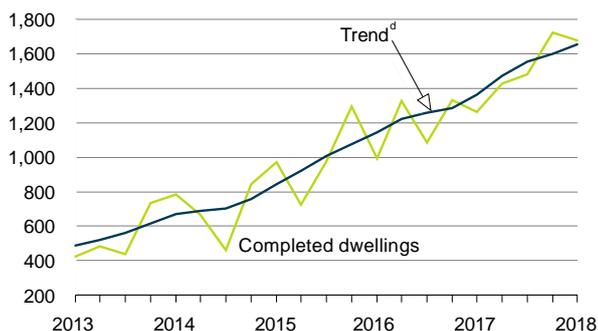
Construction volume index, 2015 = 100^b



^b Construction activities in Estonia and in foreign countries. Statistics according to the Estonian Classification of Economic Activities (EMTAK 2008, based on NACE Rev. 2).

^d Trend – the long-term general development of the time series.

Completed dwellings



^d Trend – the long-term general development of the time series.

Nights spent by accommodated persons

