Strategic Framework
Czech Republic 2030

Appendix 2: Development Analysis

Contents

Introduction

Analysis of development is an important element of the key areas. It represents the data and argumentation paths that led to the formulation of detail within each of the key areas and the determination of strategic and specific goals. The emergence of Development Analysis preceded the emergence of the key areas. The Development Analysis is divided, in analogy with the design section, into six key areas. The main findings of the Development Analysis are summed up in the SWOT analysis, which precedes the key areas in the actual strategic document.

The external context of the Czech Republic's development has been measured by analysing the impact of so-called global megatrends. Based on the analysis of the megatrends, which were described in the specialised literature and are relevant to the development of the Czech Republic, an analysis the impact of megatrends on each other was elaborated and consequently the possible impact on the effectiveness of meeting the objectives of the document was determined. The design process takes the effects of these megatrends into account.

Furthermore, the paragraphs include summary descriptions in the left column. The footnotes include brief bibliographic information that allows the reader to easily find the source in the bibliography listed at the end. Strategic and conceptual documents by individual ministries listed are usually available in the Strategy Database (www.databaze-strategie.cz).

1 People and society

Dignified work as a prerequisite for life happiness

801. Regarding the subjectively perceived well-being of the population, the Czech Republic is in a slightly below-average position within the EU.[1] *The highest values are recorded by the inhabitants of the Scandinavian states and Austria. The survey shows a positive correlation, among other things, between the amount of income, employment status of interviewees and their well-being. Also, the development of life satisfaction measured by the corresponding CVVM index indicates that, among other things, there is a link with the unemployment rate. Since 2013, the index of life satisfaction of the Czech population has been improving steadily.*[2]

Czechs going abroad

802. In the Czech Republic, however, there has been a long-term trend of people moving abroad. In the years 1993-2010, 272,000 citizens from the Czech Republic emigrated abroad and in 2010, about 220,000 Czech citizens lived abroad. On the basis of statistical offices from the given countries supplying migration data and statistics on numbers of foreigners by country of origin, these numbers are based on the total number of Czech Republic citizens who have migrated to or who now live in 42 developed countries. If data on migration from other countries was also available, it would certainly have been higher.[3] Highly-qualified workers represent a significant number of them. According to CZSO data, an average of 22,000 people are displaced from the Czech Republic abroad (average 2001-2015). Most of them are members of other states; on average, less than 2,500 Czech citizens per year relocate abroad (over the last five years, this was more than 3,000 per year). On average, however, approximately 2,000 CR citizens return to their homeland annually.

Despite the positive balance of migration, international comparison shows the Czech Republic is below average

803. In the period from 1989 onwards, the Czech Republic has changed from a country with a population deflux to a country with a population influx, i.e. with a net increase in population caused by immigration. Due to the improving social-economic conditions in the Czech Republic, demographic and climate changes in countries with a typical deflux of population, due to the more intense globalisation process, improvement of technologies and decreasing transport costs, it can be assumed that migration pressure on the Czech Republic will be on the rise. In 2013, around 30,000 foreigners arrived in the Czech Republic (*flow*).[4] In the same year, almost 442,000 foreigners lived in the Czech Republic, representing 4.2 % of the Czech population. Most of them, namely 2.5 % of the population of the Czech Republic, were citizens of non-EU countries, 1.7 % of citizens were citizens of some EU28 countries. From the perspective of other developed countries, it is considered a very low percentage. There are less than 5 % of foreigners in the population among OECD countries such as in Poland,

[1] EUROSTAT (2013) *Quality of life in Europe – facts and views – overall life satisfaction*. See also the related analysis by CZSO (2014) *Životní pohoda českých obyvatel*.
[2] CVVM (2015, 2016) *Výzkum Naše společnost, 16-04, Spokojenost s životem*.
[3] Numbers based on data used for ADSERÀ, A.; PYTLIKOVÁ, M. (2015): The Role of Language in Shaping International Migration. *Economic Journal.* 125(586).
[4] CZSO (2014) *Demografická ročenka ČR 2014.* H.14 Zahraniční stěhování podle státního občanství, pohlaví a věkových skupin – přistěhovalí.

Portugal, South Korea, Finland, Japan, Hungary and Slovakia. On the contrary, in traditional migration countries like Australia, New Zealand, Switzerland and Canada, over 20 % of the population come from other countries of origin. Most other developed countries fall within these two extremes. The most common countries of origin for foreigners living in the Czech Republic include Ukraine (105,000), Slovakia (90,000), Vietnam (57,000), Russia (33,000), Poland (19,000), Germany (18,000), Bulgaria (9,000) and the United States (7,000).[5]

National diversity is growing by increasing the Ukrainian, Vietnamese and Russian minorities

804. There has been an increase in the diversity of the composition of the national population caused by natural migration (i.e. due to reasons other than work, e.g. family) and as a result of an increase in the importance of labour immigration. This not only leads to population growth, but also to the growth of national minorities in the Czech Republic. It is essential for public policies to reflect these changes and the related impact. However, according to the latest census in 2011, the Czech Republic remains a nationally homogeneous state. About 4 % of the population of the Czech Republic stated their nationality as something other than Czech, Moravian or Silesian. The most commonly declared non-Czech nationality is Slovak, followed by Ukrainian, Polish, Vietnamese, German, Russian, Hungarian and Roma. Between 2001-2011, the numbers of Ukrainian nationals (from 0.2 to 0.5 % of the population of the Czech Republic), Vietnamese (from 0.2 % to 0.3 %) and Russian (from 0.1 % to 0.2 %) increased.[6]

The majority of Ukrainians, Vietnamese and Russians are of working age

805. Ukrainian, Vietnamese and Russian nationals do not constitute the majority of citizens of the Czech Republic.[7] The age structure of these nationalities shows that there is a high proportion of people of working age (in the age group 15-64 it is 81.4-89.1 %; since 2001 it has increased) compared to other nationalities of the Czech Republic (Czechs 68.5 %). In terms of the level of formal education achieved, Russians are above average in the Czech Republic (42.7 % of the Russian population achieved university education), Ukrainians show average educational attainment, while almost half of the Vietnamese have only primary or early years education (43.2 % of them, with an increase since 2001). The population of the three nationalities mentioned above have a common denominator represented by an above-average proportion not only of people of working age, but also of employees.[8] While most Ukrainians work in the secondary sector (industry and civil engineering), the Vietnamese and Russians work in the tertiary sector (services - retail and wholesale). Most of the Vietnamese nationals are self-employed, which is very different to the

[5] CZSO (2014) *T14 Cizinci podle kategorií pobytu, pohlaví a občanství k 31. 12. 2013*.
[6] CZSO (2014) *Národnostní struktura obyvatel*.
[7] Unlike Slovak nationals, who make up almost two-thirds of all citizens of the Czech Republic, rather than Slovakia.
[8] Ukrainian nationals represent the highest numbers (61.6 %).

national average numbers of self-employed. A small number of the Russians are employers.[9]

Large cities attract concentration of foreigners

806. The highest number of CR population of the aforementioned nationalities lives in Prague. The regions of Karlovy Vary and Ústí show significant concentrations of Vietnamese nationals, and Central Bohemia shows a concentration of Russian nationals. In terms of the size of municipalities they mostly live in, a slight majority of Ukrainians (53.2 %) and Russians (as many as 59.3 %) live in municipalities with over 100,000 inhabitants. The data is not so clear for people of Vietnamese origin, but more than a third (35.1 %) of the total number of Vietnamese in the Czech Republic live in cities with over 100,000 inhabitants and a similar number live in municipalities with under 20,000 inhabitants. The highest proportion (2.4 %) of the total population is represented by the Vietnamese in the Cheb District in the Karlovy Vary Region.[10]

Increased individualisation of society and fragmentation of indigenous communities

807. Overall, we can see society gradually becoming more fragmented. Individualisation increases across all parts of society, most notably in work life. Due to poorer labour relations, where the importance of new, more flexible forms of work is growing, employees have less and less contact with each other. Thus, the education system remains the only place for socialisation which has a universal reach - a social cohesion "anchor". In general, however, we have seen an increase in social diversity. Diverse lifestyles, and various alternative lifestyles have emerged; those living such lifestyles create distinct communities. In addition, local microeconomic systems are emerging with the ambition of energy, food and other self-sufficiency.

Increase in online communication causes society to atomise

808. The massive spread of internet communication opens up a myriad of opportunities for acquisition and dissemination of information in education. However, the education system is yet to become able to sufficiently strengthen the specific media and visual education that is necessary to ensure society's resistance to anti-democratic tendencies. With the advent of the Internet as the main communication medium, people draw information and shape their opinions more through decentralised groups on social networks than through central mass media. Closed online communities that act as "homogeneous and polarised echo chambers" which create "confirmation bias" (*confirmation of bias* - tendency to interpret certain new evidence, particularly as a confirmation of the accuracy of the existing beliefs)[11] are formed and stand outside the community debate, which can hinder central political communications.

[9] CZSO (2014) *Národnostní struktura obyvatel*.
[10] CZSO (2014) *Národnostní struktura obyvatel*.
[11] Del Vicario, M.; Bessi, A.; Zollo, F.; Petroni, F., Scala, A., Calderelli G.; Stanley, H. E.; Quattrociocchi, W. (2016) The spreading of misinformation online. *Proceedings of the National Academy of Sciences* 113(3).

An increase in immigration can be expected not only due to the population boom in countries outside of Europe

809. Demographic trends and projections of the world's population suggest significant changes in the world layout. Specifically, the population is expected to grow rapidly in the least developed regions of Africa and the Middle East thanks to a high fertility rate and prolonged lifespan. On the other hand, a population decline is expected in developed countries due to low fertility and population ageing. By 2050, Europe's population will decline by 4.29 %, while Africa's population will have grown by 108.87 %.[12] Due to such demographic trends of population ageing in Europe and rapidly growing populations in the regions of Africa and the Middle East, the growing number of migrants heading for Europe is likely to become a huge challenge. The regions of North Africa and the Middle East are characterised by a large and growing population of young people looking for work, deprived by low earnings and a lack of secure employment. Many countries in the region are facing a period of profound political and economic crisis, and some are even troubled by military conflicts.[13] With such situations, it is likely that in the future there will be a persistent and increasing migratory pressure on Europe as a neighbouring continent.

The Czech Republic will not avoid the pan-European trend of increased immigration

810. Existing communities, such as the Algerians in France, the Moroccans in Spain, the Turkish in Germany and Scandinavia, and migrants from Sub-Saharan Africa in Italy will certainly offer support to new arrivals and will encourage further chain migration from these countries.[14] Some of the migrants from these regions will also head for the Czech Republic sooner or later. The combination of differences in society and between different parts of the country, leading to a decomposition of social cohesion and international migration together can increase defensive and hostile attitudes not only towards foreigners, but also towards each other and contribute to a decline in urban security. Approaches of national politics and public opinion on a possible crisis and its solution will be crucial. It is important to strengthen the tolerance for ethnic diversity and minorities and their integration from the moment they arrive, not only in terms of reducing tension, but also to integrate foreigners in the labour market and society more smoothly. We will also need to seek responsible policies at local levels.

The demographic structure of society is changing

811. Regarding the demographic development of the Czech Republic, the current trends include low fertility (1.5 children per woman)[15] and population ageing (the proportion of the elderly in the population is growing). This is the current effect of a *sandwich generation* when people enter the life stage of parenthood later and often have to look after their elderly relatives while raising their children (most often women, which has a negative impact on their career and income resulting from women's precarious work). It is therefore essential to ensure that there are support services (community social services and others) available locally and with a

[12] WB. Population Estimates and Projections. *World Bank* [online].
[13] HANSON, G.; MCINTOSH, C. (2016) *Is the Mediterranean the new Rio Grande?*
[14] ADSERÀ, A.; BOIX, C.; GUZI, M. PYTLIKOVA M. (2016) *Unstable Political Regimes and Wars as Drivers of International Migration*.
[15] CZSO (2016) *ČR v mezinárodním srovnání.*

sufficient capacity. According to estimates, people older than 65 will represent 32 % of the population (specifically 35 % of all women and 30 % of all men) by 2050, whereas in 2015 this age group represented only 18 % of the population.[16] The period after 2035 will be the breaking point, when the high number of people born in the 1970s will gradually retire. However, 70 – 80 % of elderly pensioners in the Czech Republic have now left the job market and have voluntarily become economically inactive. They did not suffer from any health problems and had no problems maintaining their jobs at the point of retirement.[17] However, retirement is often a solution to long-term unemployment.[18]

1.1 Family and community

Family structure is changing

812. The types of family structure is changing.[19] At the same time, the age of first-time mothers is increasing (the average age is above 28 years). Nearly half of all children are born outside of wedlock. This mainly relates to the first child and it is often a non-marital, but factual cohabitation. Further children are usually born to married couples; there is still a high degree of respect for a stable family structure and remains the preference for most families. Seventy-six percent of family structures are represented by complete families, and 88 % of them are based on marriage. Complete families have higher employment rates, more children, and receive less social benefits than single-parent families. Incomplete families are also affected by higher unemployment and are significantly more vulnerable to poverty.[20] Reproductive behaviour is greatly affected by structural inequalities and education achieved; extramarital fertility is a more significant phenomenon among women with low educational attainment and in regions with high unemployment, mortality and other negative social phenomena.[21] Unmarried couples living together is a more fragile and less stable form of life than marriage.[22]

Incomplete families and families with multiple children are often at risk of poverty

813. Every second marriage ends in divorce and almost every fourth family is incomplete.[23] A related risk is the threat of poverty for these single-parent families. In addition, single mothers are even more at risk of poverty than single fathers as a result of the gender pay gap.[24] *The threat of poverty, often both absolute and relative (in relation to a childless couple*

[16] CZSO (2013) *Projekce obyvatelstva České republiky*.
[17] ŠATAVA, J. Šatava, J. (2015) *Pracovní aktivita po dosažení důchodového věku.*
[18] JURAJDA, Š.; MÜNICH, D. (2003) Understanding Czech long-term unemployment. *Finance a úvěr* 53(1-2).
EUROFOUND (2012) *Employment trends and policies for older workers in the recession*.
[19] MLSA CR (2008) *Národní koncepce podpory rodin s dětmi*; MLSA CR (2004) *Národní zpráva o rodině*.
[20] HÖHNE, S.; KUCHAŘOVÁ, V.; PALONCYOVÁ, J. (2016) *Rodiny s dětmi v České republice.*
[21] HAMPLOVÁ, D. (2006) *Mimomanželská plodnost v České republice po roce 1989.*
[22] MAŘÍKOVÁ, H., VOHLÍDALOVÁ M. (2011) Nestabilita partnerských soužití*. Socioweb* 2011(11).
[23] CZSO (2015) *Pohyb obyvatelstva – 2014;* CZSO (2015) *Demografická příručka – 2014*; CZSO (2015) *Příjmy a životní podmínky domácností – 2014.* Also see analysis HÖHNE, S.; KUCHAŘOVÁ, V.; PALONCYOVÁ, J. (2016) *Rodiny s dětmi v České republice*.
[24] MAŘÍKOVÁ, H. (ED.); KŘÍŽKOVÁ, A.; VOHLÍDALOVÁ, M. (2012) *Živitelé a živitelky*.

with the same income), also applies to families with multiple children, as the income per capita decreases rapidly with each child born.[25]

Social-economic barriers of starting a family

814. When starting a family, young people face a number of social-economic barriers. The most serious and frequent obstacles are the financial inaccessibility of housing and the difficulty of securing employment and building a career. The increasing demand for both education and employment generally affects the ability to decide to start a family, and contributes to the continuing trend of postponement of marriages and births to a later stage in life. Parenting and family security are perceived as less beneficial and less important in the societal context in comparison to work performance, as illustrated by the weakened position of employed parents. At the same time, parents must strive to achieve adequate income to provide security for multiple household members. However, the nominal net cash income of families with children per household member, including tax and social transfers, is lower in the long-term perspective than income of households without children, and even lower than household income for pensioners.[26] In terms of work-life balance, working hours are important for 81 % of employees and working schedule is important for 76 % of employees. In the years 2008-2013, the assessment of the time spent at work slightly deteriorated on average (a negative assessment of 22 % of respondents in 2013) and work schedule assessment remained approximately the same (negative for 16 % of respondents).[27]

Company atomisation interferes with beneficial community activities

815. Individualisation remains an issue both for individuals and for families. This is caused by weakened links within extended families or due to work relocation. This often leads to issues, the main problem being the lack of background to solve one's own unexpected problems and the reduced ability to respond efficiently to environmental problems.[28] That is why we find fewer self-help and self-organised activities in the Czech Republic within neighbourhood or interest-oriented coalitions. Traditional hierarchical social work only solves acute problems, has little effect on developing the potential of individuals and does little to direct them to activities beneficial to themselves, their families and society. It shows that greater involvement of people in community-based activities increases political responsibility and reduces the need for top-level interventions.[29]

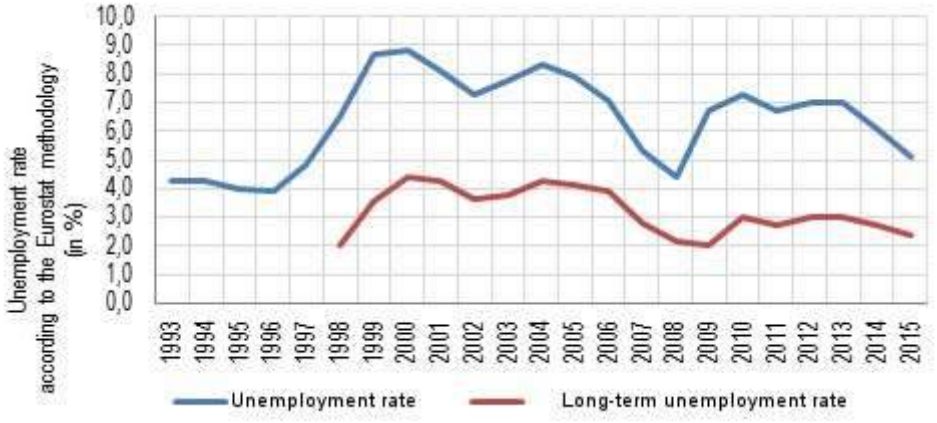
[25] HÖHNE, S.; KUCHAŘOVÁ, V.; PALONCYOVÁ, J. (2016) *Rodiny s dětmi v České republice*.
[26] MLSA CR (2016) *Vývoj vybraných ukazatelů životní úrovně v České republice v letech 1993–2015.*
[27] SVOBODOVÁ, L.; MLEZIVOVÁ, I.; VINOPAL, J.; ČERVENKA, J. (2015) *Proměny kvality pracovního života*, pp. 46–47.
[28] LIBROVÁ, H. (2010) Individualizace v environmentální perspektivě. *Sociologický časopis* 46(1).
[29] KAHNE J., WESTHEIMER, J. (2006) The Limits of Political Efficacy. *Political Science & Politics* 39(2).

1.2 Work

Unsustainable factors of decreasing unemployment

816. The declining unemployment rate over the last five years has seen an increase in the share of long-term unemployed.[30] The growing secondary sector has particularly contributed to the increased employment rate in recent years.[31] However, we can expect significant changes in the secondary sector and other sectors in the next 15 years, which are likely to lead to the disappearance of a number of current jobs.[32]

Diagram 1.1 Development of overall unemployment and long-term unemployment in CR.[33] Source: Eurostat (2016) Database Employment and Unemployment. Labour Force Survey. *Eurostat* [online], processed in-house.



Digitalisation potentially increases the structural imbalance in the labour market

817. One of the important changes affecting the situation, especially in the secondary and other sectors, is the progressive digitalisation and robotisation of production, services and other work activities. In the years 2015-2030, the analysis undertaken by the Office of the Government expects approximately 700,000 jobs to disappear and less than 300,000 jobs to emerge, i.e. the net negative difference amounts to 400,000 jobs.[34] However, according to this forecast (several tens of thousands of jobs have disappeared and emerged each year); digitalisation will only be a minor factor in the process of creative destruction in the labour market. Between 2004 and 2014, there were 50,000 to 200,000 jobs emerging each year, and a similar number of jobs also disappeared. Across the sectors, digitalisation poses the greatest threat to jobs in transportation and storage, mining and quarrying, agriculture and manufacturing. Digitalisation is a

[30] I.e. of persons unemployed for more than one year. According to Eurostat methodology, they represented 40.6 % in 2011, 43.4 % in 2012, 43.4 % in 2013, 43.5 % in 2014 and 47.3 % in 2015; 45.8 % in Q1 2016 compared with 45.7 % in 1Q 2015. EUROSTAT. Long-term unemployment by sex - annual average. *Eurostat* [online].
[31] According to regular analyses of employment development published by MLSA. THE LATEST ANALYSIS BY MLSA CR (2016) *Analýza vývoje zaměstnanosti a nezaměstnanosti v roce 2015.*
[32] See e.g. OG CR (2016) *Akční plán na podporu hospodářského růstu a zaměstnanosti* and OG CR (2015) *Akční plán pro rozvoj digitálního trhu*.
[33] Following the rise in unemployment in the Czech Republic during the (two-peak) economic crisis in 2009-2013, the unemployment rate is now decreasing. However, long-term unemployment (red) declines more slowly than the total unemployment (blue).
[34] OG CR (2015) *Dopady digitalizace na trh práce v ČR a EU*.

threat mainly to manual professions, but also to professions incorporating simpler mental activities (administrative personnel, cashiers, etc.). Digitalisation has the potential to increase existing regional disparities in unemployment. Out of the Czech regions, the Ústí region is the most at risk and the Prague region and the Central Bohemian Region are the least at risk. Similar developments have already been observed in the US.[35] According to forecasts from the PŘEKVAP project[36], the degree of risk of digitalisation is indirectly proportional to education attained, with the differences being very significant in this respect. People with an ISCED 0-2 qualification (primary education) are about 10 times more at risk than those with a master's degree.[37]

Demographic ageing will see a decline in the number of people of working age

818. It can be expected that a decrease in jobs caused by digitalisation and robotisation will be partially compensated by a decline in the productive component of the population, i.e. the workforce, due to the demographic ageing of the population. The demographic projection by the CZSO predicts a significant decline in the productive component of the population by 2020, with a subsequent stagnation in the 2020s[38] followed by another decline. In three variants of development, the CZSO predicts that in 2031, the age group 15-64 will comprise 6.4 to 6.7 million people, which is 0.3 to 0.6 million less than in 2015. The CZSO expects a significant increase in the number of people over 65 years of age from 1.9 million in 2015 to 2.4 to 2.6 million in 2031. The World Bank predicts an increase in this age group to 3.01 million by 2050.[39] The key assumptions behind the CZSO prediction is the increased median lifespan, the positive balance of migration and stable or slightly increased fertility.

Digitalisation and demographic ageing are the key factors of the labour market development

819. The aforementioned processes of digitalisation and demographic ageing are key factors in the future development of the labour market. Projections arising from the PŘEKVAP project[40] are based on the assumption of continuous economic growth with a slight increase in the number of employed persons in the years 2015-2020, but they estimate a subsequent decrease. The study shows the expected decrease in the number of employed people by 2 % by 2025, compared to 2015, respectively, and by 3 % compared to 2018. In absolute terms, the largest drop in the number of jobs over the entire period of 2015-2025 is expected in industry (137,000 jobs), a smaller decline in the primary and tertiary sector (approximately 20,000 jobs), and an increase in the quaternary sector (83,000), particularly in the fields of health and social care, arts, sports, entertainment and education. Changes in the labour market may be

[35] EP (2016) *Industry 4.0*.
[36] FOND DALŠÍHO VZDĚLÁVÁNÍ (2015) *Předvídání kvalifikačních potřeb. Vývoj odvětví. Projekce pracovních míst a zaměstnanosti v ČR do roku 2025 podle odvětví.*
[37] FOND DALŠÍHO VZDĚLÁVÁNÍ (2015) *Předvídání kvalifikačních potřeb. Čtvrtá průmyslová revoluce a zaměstnanost*.
[38] CZSO (2013) *Projekce obyvatelstva České republiky*.
[39] WB. Population Estimates and Projections. *World Bank* [online].
[40] FOND DALŠÍHO VZDĚLÁVÁNÍ (2015) *Předvídání kvalifikačních potřeb. Vývoj odvětví. Projekce pracovních míst a zaměstnanosti v ČR do roku 2025 podle odvětví*. The study predicts a loss of 700,000 people over 15 years of age between 2015 and 2025.

comparatively significant with the historical transition from an agrarian to an industrial society, especially if they follow the trend of population ageing and the pressure on higher work *precarisation*. However, digitalisation may also result in the inclusion of disadvantaged groups in the labour market (see below), due to an increase in the proportion of unprecarised flexible forms of employment.

Labour market polarisation will continue to grow

820. Digitalisation and automation contribute to the labour market polarisation by increasing the number of jobs with high and low earnings and job losses in middle income categories.[41] This process has been happening in Western Europe and USA since the 1990s.[42] In the Czech Republic, income and qualification polarisation was recorded in the economic crisis years 2011-2013[43], while the wage level of jobs had been rising until then.[44] Due to the progressive digitalisation and automation of production and services as well as the continuing expansion of atypical forms of work, trends in the Czech labour market can be expected to polarise further in the future.[45]

Platform economy is a rapidly growing industry

821. These are the types of new job opportunities produced by an on-demand economy (gig-economy). According to the European Commission, this relatively small sector of the economy is growing rapidly, gaining an important market share in some sectors and, according to estimates, revenue in the five key sectors of so-called sharing economies (accommodation/short-term rentals, passenger transport, and co-financing) almost doubled year on year.[46] *According to the Eurobarometer survey, 54 % of the Czech Republic's population (compared to 52 % in the EU28) is aware of the services offered through the platform economy and 7 % (in EU28 17 %) of them used them at least once*[47]*, indicating the dynamic potential of this new economy sector. In terms of service provider participation, at EU28 level every third user of one of the platforms was a provider, with 9 % of them offering the service only once, 18 % offering the service occasionally (several times a year), and only 5 % offering it regularly (monthly).*[48]

Platforms contribute to the growth of more casual work

822. The impact of the platform economy consists of the potential reorganisation of economic activity originally based on the employment

[41] MICHAELS, G.; NATRAJ, A.; VAN REENEN, J. (2014) Has ICT Polarized Skill Demand? *Review of Economics and Statistics* 96(1); FREY, C. B.; OSBORNE, M. A. (2013) *The Future of Employment;* OESCH, D.; RODRIGUEZ MENES, J. (2010) Upgrading or polarization? *Socio-Economic Review* 9(3).

[42] PERTOLD-GEBICKA, B. (2014) Job Market Polarization and Employment Protection in Europe*. Acta VŠFS* 8(2); ACEMOGLU, D.; AUTOR, D. (2010) *Skills, Tasks and Technologies.* Diagram 11 on page 132.

[43] EUROFOUND (2014) *Drivers of recent job polarisation and upgrading in Europe*: *European Jobs Monitor 2014,* pp. 13, 36.

[44] EUROFOUND (2014) *Drivers of recent job polarisation and upgrading in Europe: European Jobs Monitor 2014,* pp. 13, 36. OECD (2015) *In it Together*, pp. 151.

[45] OECD (2015) *In it Together, pp.* 147-149.

[46] EC (2016) Evropský program pro ekonomiku sdílení.

[47] EC (2016) *Flesh Eurobarometr 438.*

[48] Ibidem.

relationship towards self-employment or freelancing, but it is often a bogus self-employment where a worker is not formally a fully employed person with corresponding legal protection, but it is still in a subordinate position. Online platforms also use *crowdworking* (i.e. online offers of specific work tasks addressed to a large number of people), and some even allow remote services with *offshoring* potential (relocating economic activity abroad).

Platforms can also lead to higher marketisation and precarisation

823. In general, platforms increase market competition by reducing barriers to entry, thereby negatively affecting workers' salary and working conditions, and eradicating the boundaries between work and home environments with a potential risk to occupational safety and workers' health. The reputation mechanism is another factor that influences the mechanisms of the market (the system of assessments and references). In addition, platforms allow increased breakdown of work activity into individual tasks, which can be divided into high- and low-skilled, the latter being more prone to robotisation or offshoring. However, such differentiation of work has the effect of requiring workers to keep re-applying for their work tasks. Overall, the platform economy potentially contributes to higher work precarisation.[49]

Negative externalities of digitised rental platforms

824. The platform service is a model example, as it allows individuals with free accommodation to rent/sub-let residential areas, which can bring up to tens of thousands of korunas a month in some regions, which ensures a decent income for the property owner. It will not, however, be subject to taxes or considered in terms of public health insurance and social security even though it should. In the short term, it may therefore be a good earning opportunity, but in the long-term perspective, the individual is at risk of social exclusion, for example, with regard to the absence of deductible income for retirement purposes. In addition, this service has a negative impact on the amount of city centre rents that are rising due to increasing demand, resulting in an increased cost of living for local residents. Social-economic inequalities are further exacerbated, with the consequent risk of urban depopulation (Urban and Regional Development Analysis) as a result of gentrification (social-cultural changes caused by the migration of high-income populations to less prosperous localities).

The proportion of fixed-term work is growing

825. Over recent years, there has been an increase in the proportion of temporary employment in the Czech Republic, which is one of the manifestations of labour precarisation. According to Eurostat[50], in 2015, temporary contracts for total employment represented 8.1 %, compared to 6.1 % in 2009. In the PIAAC survey at the turn of 2011 and 2012, however, respondents stated the following employment modes: 16 % of employees had a temporary contract, 3 % had a contract for work, 1 % had a contract with an agency, 2 % of employees stated other contractual relationships (mostly employment agreements, contracts for work or agency

[49] DRAHOKOUPIL, J.; FABO, B. (2016) *The platform economy and the disruption of the employment relationship*.
[50] EUROSTAT. Table Temporary employees as percentage of the total number of employees. [online] *Eurostat.*

agreements).[51] Higher fixed-term employment in the Czech Republic is also confirmed by the results of European Surveys of the European Working Conditions Survey from 2015[52] and the European Skills and Jobs Survey from 2014[53] (23 % in both cases). The Eurofound[54] analysis indicates that in the Czech Republic in 2001-2012, the majority of newly created jobs were fixed-term jobs, while in 2011-2014, the number of people employed with contracts of indefinite duration decreased in all income quantiles apart from the highest, which indicates the increasing incidence of permanent employment contracts as privileges of high-income groups.[55]

Fixed-term contracts do not improve quality of life

826. Based on data from the Czech Republic and other European countries, Eurofound also highlights the many differences between the actual duration of fixed-term and indefinite employment and the fact that temporary jobs usually carry lower wages (27 % in the Czech Republic; by 10 % when excluding other factors such as age, gender, organisation size, etc.). Workers and temporary workers are also several times more vulnerable to unemployment than permanent workers. In literature, the negative impact of job insecurity on mental and physical health is well documented.[56] Transitions from temporary contracts to permanent ones in the Czech Republic, as in most other EU countries, declined in 2006-2012, so people are more often in temporary employment for a long time.[57] Consistent with this, in the Czech Republic, there was a decline in full-time employment for an indefinite period between 1995 and 2007 in favour of atypical forms of work. This trend then accelerated during the economic crisis.[58]

Demand for highly qualified workers as a consequence of labour market imbalances

827. The Czech Republic is facing population ageing and the associated increasing burden on public financial budgets. At the same time, due to problems related to the population ageing, the loss of a productive workforce needed to finance it, and due to changes in the nature of economic activity, it would be appropriate for the Czech Republic to consider changes to the financing of the social security system and to enhance the number of workers using employment opportunities to fill newly created jobs. As mentioned above, as a result of work polarisation and the process of digitalisation and robotisation, the structure of future

[51] PIAAC. PIAAC Survey results*. PIAAC* [online], our own calculations based on PIAAC data.
[52] EUROFOUND (2016) *6th European Working Conditions Survey,* our own calculation based on EWCS data.
[53] SKILLS PANORAMA. (2014) *European Skills and Jobs* Survey. In *Skills Panorama,* our own calculation based on ESJS data.
[54] EUROFOUND (2015) *Recent developments in temporary employment, pp. 7–9.*
[55] PIASNA, A. (2015) *Non-standard work arrangements, employment regulation and inequalities*.
[56] ARONSSON, G. (2005) Health and development opportunities for those in fixed-term employment. In GUSTAFSSON, R.; LUNDBERG, I. (eds.) *Worklife and Health in Sweden 2004*.
QUINLAN, M.; MAYHEW, C.; BOHLE, P. (2001) The Global Expansion of Precarious Employment, Work Disorganization, and Consequences for Occupational Health. *International Journal of Health Services* 31(2).
WAENERLUND, A.; GUSTAFSSON, P.; VIRTANEN, P.; HAMMARSTRÖM, A. (2011) Is the core-periphery labour market structure related to perceived health? *BMC Public Health* 11(1).
[57] EUROFOUND (2015) *Recent developments in temporary employment, pp.* 66–67.
[58] OECD (2015) *In it Together*, pp. 146.

demand for labour is expected to be characterised, as in other developed countries, by a stronger demand for a highly qualified workforce and, on the other hand but to a lesser extent, for workers with lower level qualifications. At present, the Czech Republic is experiencing a period of stable economic growth and low unemployment, rates which are among the lowest in the EU28. At the same time, however, the number of vacancies for highly qualified workers is not increasing, and in the global context there is an intense fight for talent. The situation in the Czech Republic differs in many ways. So far, underutilised reserves of the workforce can be found within the groups that have been hitherto disadvantaged by the labour market and also those brought by international migration.

People under the age of 24 and over 50 are disadvantaged in the labour market as well as the disabled and women with small children

828. The situation for groups who have been disadvantaged on the labour market in the Czech Republic for various reasons can be briefly outlined as follows:

829. **Young people** under the age of 24 were severely hit by the economic crisis when their unemployment increased gradually from 10 % in 2008 to 19.5 % in 2012. The recession then followed, and now the situation is close to the pre-crisis period.[59] In addition, young people from all groups are by far the most affected by fixed-term employment and involuntary part-time employment, i.e. work *precarisation*, with potentially long-term consequences for their later lives.[60]

830. **Older people** over 50 years of age have considerable difficulty in finding new positions when they lose their jobs. A large number solve this situation by involuntary retirement, which carries a life-saving income.[61] The proportion of early retirees in the total number of senior citizens therefore represented 22 % in 2013.[62] Another at-risk group are long-term carers who cannot fall back on their previous careers after completing their care and often become disadvantaged as a result of their age. Further complications for the elderly in the labour market can be expected due to the increasing retirement age and also due to the increasing importance of ICT skills that strongly correlate with age.[63]

831. The status of **disabled persons (DP)** is very difficult in the long-term perspective. They represent approximately 6 % of the working-age population[64] (if defined as persons with disability pensions). According to various data sources, their employment rate ranges from 23 % to 37 % and

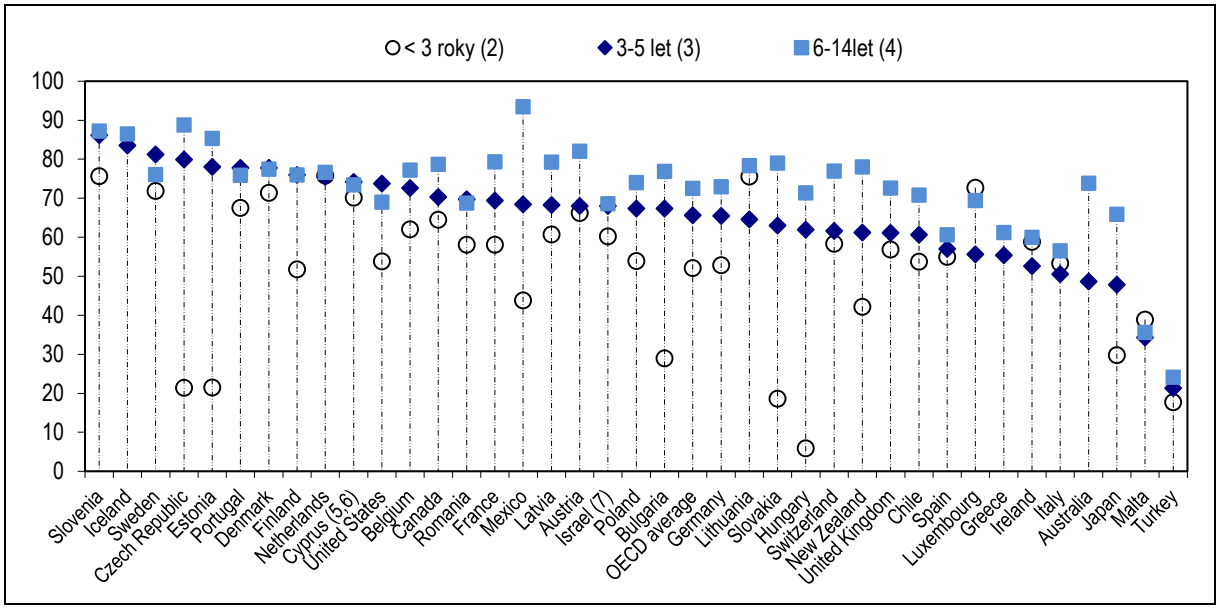
[59] EUROSTAT. Youth unemployment rate by sex, age and country of birth: 15-24 years of age. *Eurostat* [online].
[60] KŘÍŽKOVÁ, A.; FORMÁNKOVÁ, L. (2014) Intersekcionální perspektiva zkoumání dopadů krize na životní dráhy v ČR: gender, třída, věk (a rodičovství). *Gender, rovné příležitosti, výzkum* 15(2).
[61] MAZÁK, J. (2015) *Osoby ve věku 50–65 a další profesní vzdělávání, pp.* 15–16.
[62] Ibidem.
[63] STRAKOVÁ, J.; VESELÝ, A. (2013) *Předpoklady úspěchu v práci a v životě.*
[64] The proportion of disability pensions paid to the population aged 15-64. Calculation according to CZSO (2015) Vyplácené invalidní důchody ve stavu k 21. 12. 2015. *Česká správa sociálního zabezpečení* [online]; CZSO (2013) *Projekce obyvatelstva České republiky (Projekce 2013).*

probably has changed very little in recent years.[65] Among people with the most severe disabilities, who are the largest group of DPs, employment is quite rare.[66] In addition to their objective health disadvantages, DPs also face further problems with stereotyping and the resulting discrimination on the part of employers (*ableism*). Long-term problems in the system of disability diagnostics also contribute to a reduced motivation of DPs to work.[67]

832. International comparisons show that **women with young children** and women of childbearing age are strongly influenced in their careers by the relatively long duration of parental leave in the Czech Republic, very low availability of part-time employment, poor employer support for flexible forms of employment, limited access to quality, publicly-funded childcare[68] and low involvement of both parents in childcare. Although women account for more than half of all university graduates, they remain outside the labour market for a long time. Their long absence from the labour market, relating to maternity and childcare, negatively affects their qualifications and personal development due to less work experience and practice and loss of personal contacts.[69] To a large extent this is reflected in the existing differences in the labour market between men and women. Many women find returning to work very difficult, and many women become unemployed immediately after completing their parental leave.[70] The employment rate of young women with young children is exceptionally low when comparing to European counterparts.[71] On the contrary, the employment rate of mothers of older school-age children is one of the highest in the world.[72]

[65] JANÍČKO, M. (2015) *Osoby se zdravotním postižením a další profesní vzdělávání, pp.* 9–15.
[66] Ibidem.
[67] Ibidem.
[68] ŠIMEČKOVÁ, M. (2015) *Osoby na mateřské a rodičovské dovolené a osoby pečující o osobu blízkou a další profesní vzdělávání, pp.* 15–16.
[69] ADAMS, R. B.; FERREIRA, D. (2004) Women in the boardroom and their impact on governance and performance*, Journal of Financial Economics 94*. ADLER, R. D. (2001) *Women in the Executive Suite Correlate to High Profits*. FRANCOEUR, C.; LABELLE, R.; SINCLAIR-DESGAGNÉ, B. (2008) Gender diversity in corporate governance and top management. *Journal of Business Ethics,* 81(1). SMITH, N.; PARROTTA, P. (2015) Why so few women on the board of directors? *Journal of Business Ethics* (electronic publication from 30 December 2015, not yet included in the issue).
[70] BIČÁKOVÁ, A.; KALÍŠKOVÁ, K. (2015) *Od mateřství k nezaměstnanosti.*
[71] PYTLIKOVÁ, M. (2015) *Rozdíly ve výši výdělků ve vztahu k mateřství a dítěti v rodině;* PERTOLD-GEBICKÁ, B.; HUŠEK, D. (2015) *Female Labor Force Participation and Childcare Policies*.
[72] HÖHNE, S.; KUCHAŘOVÁ, V.; PALONCYOVÁ, J. (2016) *Rodiny s dětmi v České republice*.

Diagram 1.2 Employment rate of mothers by children's age in OECD countries, 2011. Source: HÖHNE, S.; KUCHAŘOVÁ, V.; PALONCYOVÁ, J. (2016) *Rodiny s dětmi v České republice,* pp. 54.



Poor offer of suitable work schedules for mothers of young children

833. The current system of redistribution[73] is unfavourable to families and the poor offer of shorter and flexible unprecarised forms of employment, along with relative poverty compared to childless life standards, and the insignificant social recognition of parental work associated with bringing up children are likely to negatively affect the willingness of women to have children,[74] which results in very low birth rates in the Czech Republic.[75] Women represent a valuable part of the workforce. Research and business practices confirm that women's representation in corporate management is in positive correlation with both their performance and their profits.[76] Women also help businesses understand customers' needs better, balancing and enriching their work groups. Reducing gender inequality and making women more involved in the labour process by offering more flexible and part-time jobs and greater understanding by employers can benefit both employees and employers and mitigate the effects of the ageing population. It is desirable that those employers who do not appreciate the importance of parenting and family backgrounds for the personal growth of their employees and the development of more "soft skills" consider changing their stereotypical approach.

[73] HAMPL, O.; KOTRBA, V. (2015) *Mapování transferů mezi rodinou a společností zprostředkovaných státem*. [Part 1, single-generation indicators.]
[74] ADSERÀ, A. (2005) Vanishing Children. *American Economic Review Papers and Proceedings*, 95(2); KALWIJ, A. (2010) The impact of family policy expenditure on fertility in Western Europe. *Demography* 47(2); MLSA CR (2004) *Národní zpráva o rodině.*; HIRŠL, J. (2004) Příspěvky českého státu rodinám na náklady spojené s výchovou dětí. *Demografie*, 2004(3).
[75] ŠŤASTNÁ A.; ŠPROCHA, B.; KOCOURKOVÁ J. (2016) *The Transition of Childbearing Patterns from the Cohort Perspective in relation to Family Policy.*
[76] Ibidem.

Migration does not have a negative influence on local workers

834. Immigrants often complement rather than substitute domestic workers; on the contrary, they can increase the wages of domestic workers.[77] However, immigrants replace domestic workers with low level qualifications or other migrants in low-qualification sectors.[78] Abroad, it has been empirically proven that migrants do not take jobs from the indigenous population nor reduce their wages except in some specific sectors and professions.[79] Only a few studies mention the slightly negative consequences of immigration.[80]

Ambiguous consequences of ethnic diversity

835. Different cultural backgrounds bring different perspectives and ideas, an ability to solve problems (heuristics) as well as knowledge of global markets and their customers, stimulating creative solutions and innovation and positively influencing workplace performance.[81] Ethnic diversity is also related to communication barriers, decreased cohesion and less trust.[82] This, on the other hand, may entail higher costs for so-called intercultural negotiations. Earlier empirical studies using regional data suggest a positive effect on economic performance.[83] Other studies using individual registry-based data show a positive effect of ethnic diversity on innovation and export rates,[84] but a negative or statistically insignificant effect of ethnic diversity on company performance.[85] Diversity, or creativity,

[77] PERI, G. (2014) *Do immigrant workers depress the wages of native workers?*
[78] ROY, A. S. (1997) Job displacement effects of Canadian immigrants by country of origin and occupation. *International Migration Review,* 31(1).
[79] CATTANEO, C.; FIORIO, C.; PERI, G. (2015) What Happens to the Careers of European Workers When Immigrants "Take Their Jobs"? *Journal of Human Resources* 50(3).
CARD, D. (1990) The Impact of the Mariel Boatlift on the Miami Labor Market. *Industrial and Labor Relations Review* 43(2). ROY, A. S. (1997) Job displacement effects of Canadian immigrants by country of origin and occupation. *International Migration Review* 31(1).
KAHANEC, M.; ZIMMERMANN, K. F. (eds.) (2010) EU labor markets after post-enlargement migration. LONGHI, S.; NIJKAMP, P.; POOT, J. (2008) The impact of immigration on the employment of natives in regional labour markets: a meta-analysis. In POOT, J.; WALDORF, B.; VAN WISSEN, L. (eds.) *Migration and human capital.*
[80] BORJAS, G. J. (2003). The labor demand curve is downward sloping. *Quarterly Journal of Economics,* 118(4).
[81] HONG, L, PAGE, S. E. (2001) Problem solving by heterogeneous agents. *Journal of Economic Theory* 97(1). HONG, L.; PAGE, S. E. (2004) Groups of diverse problem solvers can outperform groups of high-ability problem solvers. *Proceedings of the National Academy of Sciences of the United States of America* 101(46). BERLIANT, M.; FUJITA, M. (2011) The dynamics of knowledge diversity and economic growth. *Southern Economic Journal* 77.
OSBORNE, E. (2000) The deceptively simple economics of workplace diversity, *Journal of Labor Research,* 21(3). LAZEAR, E. P. (1999) Globalisation and the market for team-mates. *The Economic Journal 109.*
[82] LAZEAR, E. P. (1999) Globalisation and the market for team-mates. *The Economic Journal 109.*
[83] OTTAVIANO, G.; PERI, G. (2006) The economic value of cultural diversity. *Journal of Economic Geography. 6*.
ALESINA, A.; LA FERRARA, E. (2005) Ethnic diversity and economic performance. *Journal of Economic Literature* 43(3).
SPARBER, CH. (2009) Racial diversity and aggregate productivity in US industries 1980–2000. *Southern Economic Journal* 75; SPARBER, CH. (2010) Racial diversity and macroeconomic productivity across US states and cities. *Regional Studies* 44; SUEDEKUM, J.; WOLF, K.; BLIEN, U. (2009) Cultural Diversity and Local Labor Markets. *IZA Discussion Paper* No. 4619.
[84] PARROTTA, P.; POZZOLI, D.; PYTLIKOVA, M. (2014) The Nexus between Labor Diversity and Firm's Innovation. *Journal of Population Economics* 27(2).
PARROTTA, P.; POZZOLI, D.; SALA, D. (2016) Ethnic Diversity and Firms´ Export Behavior.
[85] PARROTTA, P.; POZZOLI, D.; PYTLIKOVA, M. (2014) Does Labour Diversity affect Firm Productivity? *European Economic Review* 66.

is one of the important elements needed for innovation-driven economic growth.[86]

Types of migrants easier to integrate into the labour market and society

836. Certain types of migrants are beneficial to the recipient country and economy in terms of rapid integration into the labour market and society, and the smooth transfer of knowledge and creative capabilities to businesses and society. Out of the four types of migration we identify - i.e. 1) economic migration of workers, 2) family reunion migration, 3) student migration, and 4) migration of refugees from war-torn countries and political conflicts - the economic migration of workers coming to work is the optimal type in terms of selecting the appropriate characteristics needed for integration into society and, in particular, to secure employment. These economic migrants are mostly young, healthier individuals with better skills and education (and mostly with relatively transferable skills).[87] *Immigrants from countries which are closer, both linguistically and culturally, are integrated into the labour market and society more easily than linguistically more remote countries.*[88] *Family members migrating in the context of family reunion are, in terms of characteristics suitable for smooth integration into the labour market, not necessarily as suitable for such employment.*[89]

Refugees and graduates

837. The least suitable characteristics from the point of view of integration into the labour market and society are found in groups of refugees, since in the absence of war or political pressures, these people would generally not move at all. In addition, a large proportion of refugees often experience traumas which they carry with them which often makes it difficult for them to engage in both the labour market and society itself. However, the reception of immigrants within this category of refugees is the responsibility of each country, on a smaller or larger scale, given the commitment to the *Geneva* Convention *on the Status of Refugees*. Another option is foreign students who are also suitable candidates for migration. At present, students from non-EU countries and students in the CR are often forced to leave the country after completing their studies if they do not have another reason to stay, such as employment (they have free access to the labour market for this purpose). However, these are people who do not have an integration problem because they have familiarised themselves with the language, society, and established social contacts during their studies. For example, the United States (US) considers foreign students a source of highly qualified workers and tries to keep them in the US, for example, by providing them with a year to find a job after they finish their studies, and the local authorities actively help them. Thanks to this policy, one-third of those employed in the fields of technology and natural sciences from abroad are among the graduates of doctoral studies; they actually

[86] AGHION, P. (2012) *From growth theory to growth policy design.*
[87] CHISWICK, B. R. (1999) Are immigrants favourably self-selected? *American Economic Review* 89(2).
[88] ADSERÀ, A.; PYTLIKOVA, M. (2016): Language and Migration. In Ginsburg, V.; Weber, O. (eds) *The Palgrave Handbook of Economics and Language*.
[89] CHISWICK, B. R. (1999) Are immigrants favourably self-selected? *American Economic Review* 89(2).

represent more than 50 %. These workers are significantly involved in innovation and are a major drive of the US economic growth.[90]

Suitable environment for smooth integration of foreigners

838. Other factors influencing the smooth integration of foreigners into the labour market and society concern the institutions and attitudes of the majority population. Some studies suggest that negative attitudes of the majority society towards foreigners reduce immigration.[91] Foreigners from other EU countries and other developed countries, from linguistically close countries and from countries with a relatively better educated population are especially sensitive to these attitudes.[92]

1.3 Inequalities

Greater life satisfaction is conditioned by low social-economic inequalities

839. One of the obstacles to improving our quality of life is the significant inequalities in society. Surveys show that people's greater life satisfaction (including their health) occurs alongside lower social-economic inequalities in society.[93]

The "*scissors open*" the most in a period of economic growth

840. At the time of the economic recession, household income in the lower income quantile (the lowest 10 % of household income) increased faster than household income in the upper quantile. On the contrary, the income growth of the richest 10 % of households showed higher dynamics in the boom period than the income of the poorest 10 % of households.[94] The social system thus dampens the effects of the recession on low-income households, but overall, the "*scissor opening*" continues between low and high-income households.[95]

[90] PERI, G.; BASSO, G. (2016) *Opportunity Lost.*
[91] GORINAS, C. AND PYTLIKOVÁ, M. (2015) The Influence of Attitudes toward Immigrants on International Migration. *International Migration Review* 49(4).
[92] Ibidem.
[93] HAHEY, T., SMYTH, E.; SIRGY, M. J.; RAHTZ, D. (2004) Do subjective indicators measure welfare? *European Societies* 6(1); VERME, P. (2011) Life satisfaction and income inequality. *Review of Income and Wealth* 57(1).
[94] DUBSKÁ, D.; ZEMAN, J. (2015) *Analýza vývoje indikátorů nerovnosti v ČR a jejich dopad na růstový potenciál ČR*.
[95] For the years 1989-2014, gross monetary income per person in households increased by 6.6 times (net 6.5 times) according to data from family accounts; by 5.5 times (net 5.6 times) in the lowest earning 10 % of households, but by 7.8 times (net 7.7 times) in the highest earning 10 % of households. According to the aforementioned analysis by DUBSKÁ, D.; ZEMAN, J. (2015) *Analýza vývoje indikátorů nerovnosti v ČR a jejich dopad na růstový potenciál ČR*.

Diagram 1.3 Annual gross monetary income per person from top earning 10 % of households (red) and lowest earning 10 % of households (blue) (in CZK). Source: Dubská, D.; Zeman, J. (2015) *Analýza vývoje indikátorů nerovnosti v ČR a jejich dopad na růstový potenciál ČR*, pp. 17.

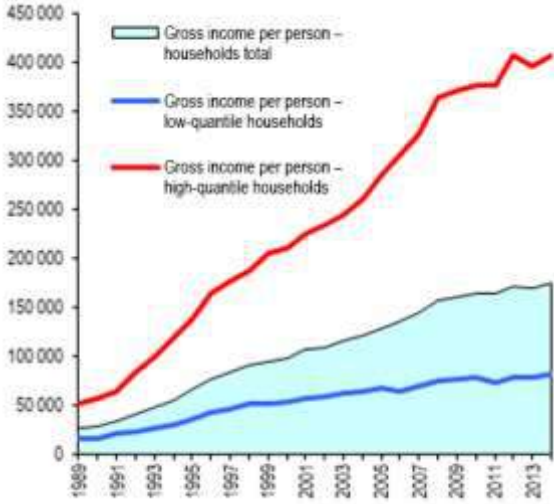
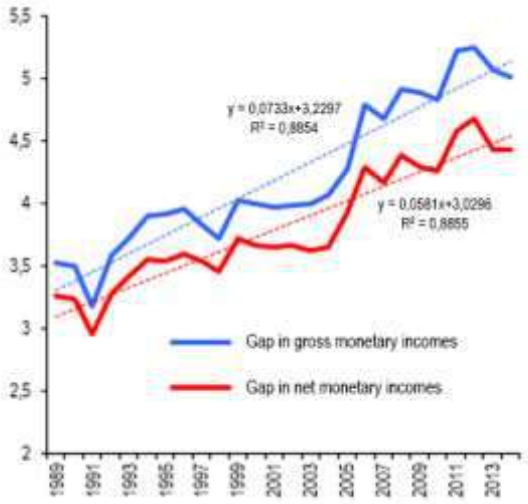


Diagram 1.4 Excess of the upper income quantile above the lower income quantile (gross and net income, development 1989-2014). Source: Dubská, D.; Zeman, J. (2015) *Analýza vývoje indikátorů nerovnosti v ČR a jejich dopad na růstový potenciál ČR*, pp. 17.



Inequality in peripheral areas is increased by geographic conditions

841. Inequalities are not only reflected in the income dimension of households, but also in the spatial availability of employment and public services.[96] In the Czech Republic, there are areas where the younger population moves to cities due to a steady decline in the level of public services provision (limited health care in the location, declining public transport services) and maintains their property mainly for recreational purposes. This leads to a depopulation of the countryside and a concentration of the population in several settlement centres (the key area of Municipalities and Regions). In peripheral areas, population ageing tends to be evident and the quality of life deteriorates significantly.

Inequalities are exacerbated by discrimination against already vulnerable groups

842. In addition to limiting the potential for personal development due to low income or poor availability of services, we witness social inequalities linked to prejudice and discrimination based on gender,[97] age, ethnicity, dependency, disability, sexual orientation, religion or worldview. In practice,

[96] Public services are defined throughout the document as "services created, organised or regulated by a public authority to ensure that the service is provided in a way that may be considered necessary to meet social needs while respecting the principle of subsidiarity. The public administration itself with all its levels is understood as a service for the citizen. The public service therefore entails so-called public utility services, which are organised by the state, the region or the municipality, provided in a natural (material) form or regulated. They are provided in the form of financial support and administrative activities in the broader sense, regardless of whether or not they are regulated by law". The definition is taken from the annex to the Government Resolution. GOVERNMENT CR (2002) *Usnesení vlády České republiky č. 164 ze dne 20. února 2002 k návrhu záměru zákona o standardizaci vybraných veřejných služeb.*

[97] The Czech Republic is average among the OECD countries. See OECD Gender wage gap. *OECD Gender Equality.* [Online] However, CR is significantly below-average within EU28: EC (2015) *Gender pay gap in the Czech Republic*; MYSÍKOVÁ, M. (2012) Gender Wage Gap in the Czech Republic and Central European Countries. *Prague Economic Papers* 21(3).

people most at risk of discrimination are those socially excluded and otherwise disadvantaged, who cannot effectively defend against discrimination, and those who face multiple discrimination (i.e. for many reasons). Disadvantaged groups include women[98] (e.g. due to salary imbalances), foreigners, members of certain ethnic minorities (especially Roma), disabled people, the elderly, mothers with children, people with low level qualifications, released convicts and drug addicts.

The current state of the prison system is not contributing to a decline in social inequalities

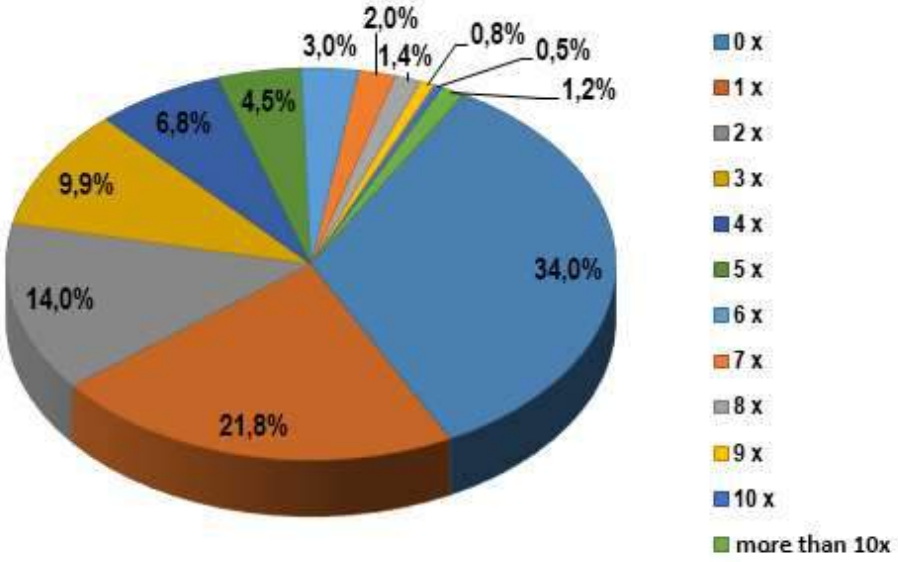
843. Many of the above disadvantages overlap and some public systems are multiplied, albeit not deliberately. The prison system provides an example. Because of the high rate of recidivism (see Diagram 1.5) penal facilities are already at capacity. The extent of so-called penological recidivism (the number of repeatedly incarcerated perpetrators) is around 70 % in the Czech Republic.[99] However, this does not correspond to the number of prison system employees. Penal facilities also host a relatively high percentage of people with experience of addiction to psychotropic and narcotic substances[100] or who are suffering from various mental illnesses. Also, the prison population ageing is reflected in increasing demands for dignified incarceration conditions for elderly citizens, including the need to ensure adequate medical care. The prison system is facing a long-term unsatisfactory state in terms of prison buildings, which is also a limiting factor in the employment of convicts, their education, therapy and other activities. As a result, the remedial component is not sufficiently balanced with the retributive component, the disadvantages faced by the convict are increased, and the penal system is unable to effectively perform its role in protecting society from repeated criminal activity.

[98] Aggregate reports on gender equality (equal opportunities) have been prepared at the level of the Government of the Czech Republic since 1998 (for the years 2011 and 2012 by the MLSA, otherwise by the OG CR), the latest report from this series by OG CR (2016) *2015 Report* on *Women and Men and on the Implementation of the Governmental Strategy for Gender Equality in the Czech Republic for 2014-2020.*

[99] PRISON SERVICE OF THE CZECH REPUBLIC (2015) *Statistická ročenka Vězeňské služby ČR.*

[100] PRISON SERVICE OF THE CZECH REPUBLIC (2015) *Statistická ročenka Vězeňské služby ČR.*

Diagram 1.5 Percentage breakdown of convicts according to the number of prison sentences already executed by 31. December 2015. Source: VĚZEŇSKÁ SLUŽBA ČR (2016) *Statistická ročenka Vězeňské služby České republiky 2015,* pp. 91 (rounded up to one decimal place).



Gender inequalities persist in various areas of social life

844. Gender inequalities persist not only in the labour market, but also in other areas of social life. According to the EIGE ranking of the level of gender equality in the EU member states, the Czech Republic value is 43.8, well below the EU average (52.9).[101] Compared to the EU average, the Czech Republic is lagging behind in terms of economic inequalities, participation in the labour market and low representation of women in decision-making and power positions, in particular low representation of women in positions of leadership of the largest companies.[102] For example, the proportion of women on boards of directors and supervisory boards of listed companies on the Prague Stock Exchange is only 12.6 %.[103] Over the past 10 years, there has been no significant change and women's representation has remained low in these positions over the last 10 years. The difference in average wages for men and women is 21.6 %, which is one of the highest differences in the EU. Gender differences in wages and periods away from the labour market due to parenthood and care of a relative are reflected in the significant gender pay gap close to retirement age and the significantly higher risk of poverty faced by women. One of the most serious reflections of gender inequality is violence against women, which occurs across societies and social strata, particularly in the forms of domestic violence, rape, sexual harassment and cyber-violence.

[101] EIGE (2015) *Gender Equality Index 2015*.
[102] EC (2015) *Gender balance on corporate boards.*
[103] GOVERNMENT CR (2015) The government supported a directive for higher representation of women in large companies. *Archiv zpráv minulých vlád.* [2 December 2015].

The need to pay special attention to the Roma national minority

845. Due to their visible differences, Roma people are one of the most frequent victims of discrimination, not only in the Czech Republic but also in other European countries. According to FRA/UNDP 2012, more than 60 % of Czech Roma people felt discriminated against on the basis of their ethnicity during that year.[104] An unequal status is reflected, for example, in equal access to education and services, non-discriminatory labour market environment, housing, or access to health care. Roma people, as well as other national minorities, may face multiple discrimination when people are discriminated against for more than one reason. For example, a job seeker may be discriminated against because she is a Roma, because she is a graduate without work experience or because she cares for children under the age of 15.

The group most at risk are people over 55 years of age, especially the elderly

846. The excellent position held by the Czech Republic in the ranking of European countries persists in virtually all indicators of SILC disparities.[105] However, a look "under the surface" of individual indicators (i.e. their classification, e.g. values for various categories of age, sex or region) allows us to identify a range of problems. In terms of labour shortage and material deprivation, people aged 55-59 and those over 65 living alone are at high risk (especially women where the risk rises with their increasing age). The proportion of so-called working poor people, i.e. people who are employed but still often fall into poverty, is also non-negligible. Compared to the EU average, the Czech Republic also has a significantly higher proportion of people living in undersized residential quarters.[106]

Education is a "safety net" against the risk of poverty and social exclusion of families

847. The threat of poverty among people aged 55–59 and 65+, especially for women, children and young people, is significant in the Czech Republic. In particular, children under the age of six and people under the age of 18 are at risk if they live in households with low intensity of work, or if their parents have only achieved a basic level of education. On the other hand, in families where both parents have gone on to college and/or university, this risk is very low for children under six years of age in the Czech Republic compared to the EU average. Education thus appears to be a significant factor against the risk of poverty or social exclusion.[107]

Structural inequalities as the cause of homelessness

848. The combination of structural (education, age, gender, economic inequalities, etc.) and individual factors (e.g. family situation, health status, experience with state education) can lead to homelessness as an extreme form of social exclusion.[108] The absence of adequate and stable housing as

[104] EUROPEAN AGENCY FOR FUNDAMENTAL RIGHTS; UNITED NATIONS DEVELOPMENT PROGRAMME (2012) *The situation of Roma in 11 EU Member States*, pp. 21.
[105] EUROSTAT (2014) *Living Conditions in Europe.*
[106] In the Czech Republic, the average number of rooms per person is 1.4, which is below the average in the EU28, where it was 1.6 (data from 2014). EUROSTAT. Average number of rooms per person by type of household and income group from 2003 – EU-SILC survey. *Eurostat* [online].
[107] "In 2011, 27 % of children aged less than 18 were at risk of poverty or social exclusion. Risk of poverty decreases with increasing education level of parents." EUROSTAT (2013) *At risk of poverty or social exclusion in the EU27, pp*. 1.
[108] MLSA CR (2013) *Koncepce prevence a řešení problematiky bezdomovectví v ČR do roku 2020.*

a basic necessity of life makes it difficult for the affected individuals and families to engage in economic activity, education or administration of public affairs, which leads to further negative individual and social consequences.[109] Qualified estimates[110] show not only a high number (nearly 70,000) of people without permanent housing (outdoors, in dormitories, hostels, shelters, people in between residential institutions, etc.), but also a high number of people at risk of losing their housing, amounting up to 120,000 people.

1.4 Education

Social-economic background has a significant impact on educational outcomes

849. Social inequalities are also evident in education. OECD's PISA research from 2012 demonstrated that, in developed countries, including the Czech Republic, there is a strong link between students' social-economic background and their learning outcomes. The degree of equal access to education is reflected in research carried out of 15-year-old students' literacy in reading, mathematics and natural sciences through the relationship between the ESCS index (social, economic and cultural status index) and their results in individual literacy. With its score of 51 points, the Czech Republic falls within the countries where the social-economic background has the greatest impact on students' educational results. The average amongst the OECD countries is 39 points, where the correlation between educational outcomes and social-economic background has been growing since 2003.[111] The low level of educational mobility in the Czech Republic goes hand in hand with these findings. Less than 20 % of 25–44-year-olds with both parents who have achieved an *upper secondary and post-secondary non-tertiary education* (ISCED 2011 3-4) had high (i.e. higher professional, *tertiary education* - ISCED 2011 6-8)[112], while in the OECD countries, such mobility was linked to more than 40 % of people.[113] The European Commission's report[114] also highlights the impact of social-economic inequalities.[115] It also identifies other structural problems of the Czech education system, which include the poor age demographics of teachers[116], insufficient recognition for the teaching profession[117] (due to

[109] MLSA CR (2014) *Konsensuální konference o bezdomovectví v České republice.*
[110] MLSA CR (2015) *Vyhodnocení průzkumu řešení bezdomovectví v obcích s rozšířenou působností.*
[111] CSI (2013) *Hlavní zjištění PISA 2012.*
[112] UNESCO Institute for Statistics (2012*) International Standard Classification of Education ISCED 2011.* Available at: http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf.
[113] OECD (2016) *Education at a Glance* 2016, pp. 80.
[114] EC (2016) *Doporučení pro Doporučení Rady k národnímu programu reforem České republiky na rok 2016 a stanovisko Rady ke konvergenčnímu programu České republiky z roku 2016.*
[115] "The results of education are generally good, and they are strongly influenced by the social-economic background of students. Weak results of education among disadvantaged groups, especially the Roma, are clearly worrying"; ibid., pp. 5. National annex to the PIAAC international survey provides similar results. See STRAKOVÁ, J.; VESELÝ, A. (EDS.) (2013) *Předpoklady úspěchu v práci a v životě.*
[116] CZSO (2013) *Zaostřeno na ženy a muže – 2013*, v sekci Vzdělání, statistiky věkové struktury učitelů regionálního školství bez řídících pracovníků.
[117] MÜNICH, D.; PERIGNÁTHOVÁ, M.; ZAPLETALOVÁ, L.; SMOLKA V. (2015) *Platy učitelů českých základních škol.*

low salaries, among other things), the low quality of their preparation[118], external differentiation of educational pathways[119] performed too early, the growing inconsistency of social demand for education with the offered range of educational methods[120], etc. According to most existing empirical literature, the differentiated education system has little or no negative effect on students' average learning outcomes, while only a small number of analyses have found a positive overall effect. Differentiated education, however, has undoubtedly increased inequalities between study results.[121] At the same time, it has proven to reduce social cohesion as a result of the homogenisation of educational flows.[122]

Increasing trends of social-economic exclusivity accessing the most and least prestigious education

850. Social-economic origin affects young people's chances of accessing a full secondary education more than it affects older people,[123] leading to an ever greater concentration of children from lower social classes in apprenticeships.[124] The numeracy and literacy of graduates who have accessed apprenticeships and not completed final examinations in school are at a much lower level in the context of its deepening negative exclusivity.[125] At the opposite end of secondary education, in grammar schools, representation of children from families with high social-economic status, which previously accounted for the majority, increased in the years 2000–2009.[126] Meanwhile, the comparison between eight-year and four-year study programmes at grammar schools does not show significantly higher literacy and numeracy skills of students who have the same social-economic status; however, students who have followed an eight-year study programme have evaluated their programmes as improved. It also provides almost complete certainty of university admission regardless of the level of academic competence.[127] The eight-year study programme at grammar schools therefore acts as a social filter that does not necessarily improve the numeracy and literacy skills of its students, but it still affects the chances of success in later life.

[118] OECD (2013) *Mezinárodní šetření TALIS 2013*.
[119] STRAKOVÁ, J. (2010) Přidaná hodnota studia na víceletých gymnáziích ve světle dostupných datových zdrojů. *Sociologický časopis* 46(2).
[120] See MEYS CR (2015) *Analýzy vývoje (ne)zaměstnanosti absolventů a absolventek středních škol*.
[121] VESELÝ, A.; MATĚJŮ, P. (2010) Vzdělávací systémy a reprodukce vzdělanostních nerovností. In MATĚJŮ, P.; STRAKOVÁ, J.; VESELÝ, A. (eds). *Nerovnosti ve vzdělávání.*
[122] Ibidem.
[123] MATĚJŮ, P.; ANÝŽOVÁ, P., SIMONOVÁ, N. (2013) Vliv osobnostních, rodinných a sociálních faktorů na dosažené vzdělání a úroveň kompetencí. In STRAKOVÁ, J., VESELÝ, A. (eds.) *Předpoklady úspěchu v práci a v životě,* pp. 118.
[124] KATRŇÁK, T., SIMONOVÁ, N.; FÓNADOVÁ, L. (2013) Od diferenciace k diverzifikaci: test MMI a EMI v českém středním vzdělávání v první dekádě 21. století. *Sociologický časopis* 49(4), pp. 515.
[125] KOUCKÝ, J., ZELENKA, M. (2013) Kontext a důsledky vzdělávací expanze. In STRAKOVÁ, J.; VESELÝ, A. (eds.) *Předpoklady úspěchu v práci a v životě, pp.* 213.
[126] Ibidem.
[127] STRAKOVÁ, J. (2010) Přidaná hodnota víceletých gymnázií ve světle dostupných datových zdrojů. In MATĚJŮ, P.; STRAKOVÁ, J.; VESELÝ, A. (eds.) *Nerovnosti ve vzdělávání.*
SIMONOVÁ, N.; SOUKUP, P. (2010) Působení primárních a sekundárních faktorů sociálního původu při přechodu na vysokou školu v ČR. In MATĚJŮ, P.; STRAKOVÁ, J.; VESELÝ, A. (eds.) *Nerovnosti ve vzdělávání.*

People are studying over a longer period, causing a shift in life stages

851. The area of education is changing. Young people are studying for longer (or more specifically there are more students at universities than before), which means they are joining the labour market later.[128] In general, the life stages (age of parents at birth, retirement age and median lifespan) are changing. In addition, these days knowledge can be picked up outside of school, although such informal knowledge still requires input to ensure its processing. Also, the way children spend their leisure time is not beneficial. For example, the proportion of active activities (sports, hobbies) drops at the expense of surfing on the Internet;[129] children also spend little time outdoors in the countryside, despite the proven positive effects of this activity on children's mental and physical development.[130] The education system is not prepared for this; many specialised types of secondary education are traditionally regarded as the final stage of education, which significantly reduces the chances of graduates applying themselves (the unemployment rate amongst people who have not accessed a secondary education is significantly higher than for people who completed their secondary education and even higher for those who progressed to higher education).[131] Years ago, those who completed their secondary school education immediately sought employment; with digitalisation, this ambition is no longer possible. There is robust evidence that a narrower vocational education increases the chances of youth employment, however, general education helps to ensure people remain in employment for much longer as it provides a broader skill base which is needed to adapt to changing environments. This relationship is independent of age, level of education, physical labour intensity, and a number of other controlled factors.[132]

Public expenditure on education is relatively low

852. Regarding investment in education, the country is lagging behind the OECD countries, and in comparison with its neighbours, the proportion of highly educated people in the Czech Republic is significantly lower. To help illustrate, the Czech Republic spends 3.4 % of its gross domestic product (2013) on education, but the average spent in OECD countries is 4.8 %.[133] The Czech Republic spends $7,493 per annum per pupil / student (from elementary to tertiary education) (adjusted by PPP), while the OECD average is $10,493.[134] Therefore, the Czech Republic sits at the bottom of the Organization of Economic Cooperation and Development (OECD) rankings of member states. In terms of the proportion of the population who

[128] In 2015, 31 % of people aged 25-34 accessed higher education in the Czech Republic compared to only 14 % in 2005, see OECD. Population with tertiary education. *OECD* [online].
[129] CHOMYNOVÁ, P.; CSÉMY, L.; MRAVČÍK, V. (2016) *Evropská školní studie o alkoholu a jiných drogách (ESPAD) 2015*.
[130] DANIŠ, P. (2016*) Děti venku v přírodě.*
[131] CZSO (2016) *Trh práce v ČR – časové řady – 1993–2015.*
[132] HANUSCHEK, E. A.; SCHWERDT, G.; WOESSMANN, L. ZHANG, L. (2015) *General Education, Vocational Education, and Labor-Market Outcomes over the Life-Cycle.*
[133] OECD (2016) *Education at a Glance 2016*. Table B4.1 Total public expenditure on education (2013).
[134] OECD (2016) *Education at a Glance 2016*. Table B1.1 Annual expenditure per student by educational institutions for all services (2013). In equivalent USD converted using PPPs for GDP, by level of education, based on full-time equivalents.

has accessed tertiary education, the Czech Republic is also well below the OECD average.[135]

The number of private primary schools is increasing

853. A concerning trend over recent years has been the expansion of private primary education, which is in sharp contrast to the idea that all children should have equal access to gaining a good education when starting off on their educational pathways. The proportion of pupils in private elementary schools compared to the total number of pupils accessing a given level of education has been steadily increasing since 2005/2006. Between 2010 and 2015, the number of pupils in private primary schools increased by 64 %, with absolute growth accelerating each year, reaching up to 1.1 % in 2015/2016.[136] On the other hand, the proportion of students in private secondary schools has remained fairly stagnant for some years at between 12 % and 14 %. Over recent years, the number of students in private higher education institutions (which do not automatically have a reputation for providing the very best education) has declined, and in 2015/2016 they only represented 11 %.[137] This may be a reflection of the need for a change to the education system.[138] Qualitative educational needs go beyond the limits defined by the OECD's[139] quantitative indicators; the needs are being newly formulated by UNESCO in the context of *Agenda 2030*.[140] The completion of curricular reform is also a priority of Czech education policy[141] in order to respond to changes in society and to transform them into the education system.[142] In this respect, it is based on the agreed *Strategy 2020*.[143] The education of future citizens should be based on teaching relevant knowledge and ways of using it (substantive arguments for *evidence-based policy*), developing competencies, supporting constructivist approaches in education and system thinking, and developing the ability to adapt to *resilience* at all levels of the education system.[144]

1.5 Health

Inequalities in mean lifespan are significant

854. Mortality has been decreasing for a long time, which is reflected in the increasing life expectancy at birth (mean lifespan), which increased in the 1990s to 2014 in all 28 EU countries. The largest increase (excluding Estonia with 7.5 years) was recorded by the Czech Republic (by 7.4 years) to 78.9 years[145], but this was still below the European average, which was 80.9 years in 2014.[146] In the Czech Republic in 2015, it was 75.8 years for

[135] OECD (2016) *Education at a Glance 2016*.
[136] MEYS CR (2016) Vývojová ročenka školství 2005/06–2015/16.
[137] Ibidem.
[138] ASPEN INSTITUTE PRAGUE (2016) *Česko.*
[139] OECD (2016) *Education at a Glance 2016*.
[140] UNESCO (2016) Global education monitoring report.
[141] MEYS CR (2015) *Dlouhodobý záměr vzdělávání a rozvoje vzdělávací soustavy České republiky na období 2015–2020.*
[142] Ibidem, pp. 10.
[143] MEYS CR (2014) *Strategie vzdělávací politiky České republiky do roku 2020*.
[144] See e.g. MEYS CR (2016) *Soustavná podpora občanského vzdělávání na školách.*
[145] EUROSTAT (2016) *Mortality and life expectancy statistics.*
[146] OECD (2016) *Health at a glance Europe 2016*.

men and 81.4 years for women.[147] However, this indicator is significantly influenced by environmental and social determinants of health and related health inequalities. For example, the lifespan of men with a university education is significantly higher in the Czech Republic than for men who have achieved a basic education. For other EU countries, this difference is also noticeable, but it is significantly smaller.[148]

Health is negatively affected by environmental hazards and unhealthy lifestyles

855. In general, the most common cause of death in the Czech Republic is chronic non-infectious diseases, especially diseases of the circulatory system, which represented 49.9 % of all deaths for women and 41.9 % for men in the year 2015 (more than half of these deaths are due to *ischaemic heart disease*). The second most common cause of death in 2015 is long-term malignant neoplasms (22.3 % for women and 27 % for men) and respiratory diseases (6.1 % for women and 7.4 % for men).[149] The health status of the population is negatively affected by environmental factors, in particular by high-risk emissions from domestic solid fuel heaters (coal), from diesel and petrol engines (microaerosols $PM_{2.5}$, polycyclic aromatic hydrocarbons PAU, benzo(a)pyrene) and other hazardous substances in the air, including the indoor environment of buildings, water (hormonal disruptors) and food. Other risk factors (noise, excessive weight and obesity, smoking, alcohol consumption, stress, lack of physical activity and poor quality and composition of food) contribute to the deterioration of health.[150] Insufficient physical activity, obesity, smoking, and alcohol consumption are very common in the Czech Republic compared to developed countries, especially in children and adolescents.[151]

People are living longer, but the number of years enjoying good health is stagnating

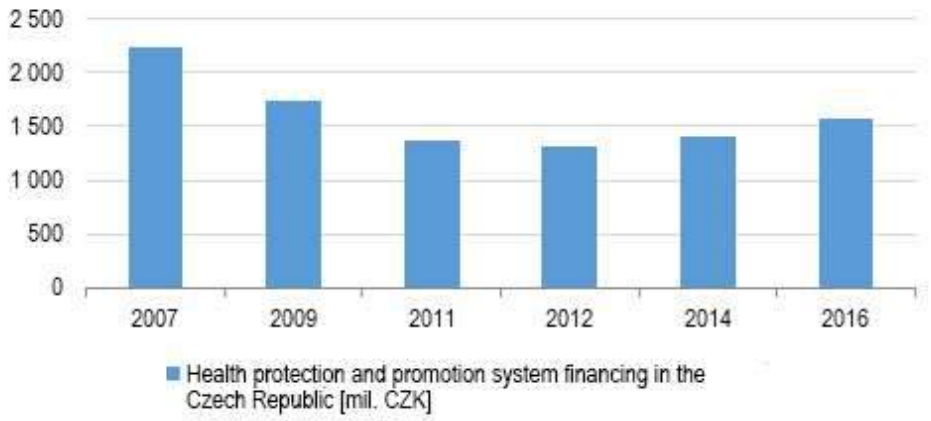
856. Since 2008, our lifespan (in good health) has increased. In 2008, the average number of years of good health was 63.4 years for women and 61.3 years for men in the Czech Republic, and in 2014, it increased to 65 years for women and 63.4 years for men. This figure is slightly above the EU28 average (61.8 years for women and 61.4 years for men), but below the values in Sweden, for example.[152] The proportion of lifespan in good health to life expectancy at birth also increases, but only very slowly; it was 78.8 % for women in 2008 and 79.2 % in 2014, and for the same years it was 82.7 % and 83.6 % for men (compared to EU28, the average in 2014 was 73.9 % for women and 78.6 % for men). If this were not the case, a greater increase in mean lifespan over healthy lifespan would prolong life in illness or with health restrictions, which would not contribute to the quality of life of the population. It would also pose a burden on the health and social care system and society's economy.

[147] CZSO (2016) *Vývoj obyvatelstva České republiky – 2015.*
[148] Data for 2013, according to the publication by OECD (2016) *Health at a Glance Europe 2016*.
[149] CZSO (2016) *Vývoj obyvatelstva České republiky – 2015.*
[150] MH CR (2015) *Zpráva o zdraví obyvatel České republiky.*
[151] See e.g. the study by WHO (2016) *HBSC – Health Behaviour in School-aged Children.*
[152] EUROSTAT (2014) *Public Health.* Health expectancy. Healthy Life Years at birth, at age 65.

Extending a healthy lifespan is possible thanks to public support for health

857. The way to prolong a healthy lifespan is through primary prevention of illnesses, improving the environment, protecting and promoting health and influencing the main determinants of health.[153] Public expenditure invested in health support represents only a fraction of the total public expenditure on healthcare (in the order of only 1%) and its development over the last 10 years has not been particularly positive (see Diagram 1.6). In the long-term perspective, healthcare expenditure in the Czech Republic is lower than the OECD average (in 2015, 7.5 % of GDP in the Czech Republic compared to the OECD average of 9 % of GDP). The difference is not only due to lower private expenditure on healthcare, the Czech Republic is also below the OECD average in terms of the proportion public health expenditure to GDP: In 2015, in the Czech Republic this was 6.4 % of GDP, OECD average was 6.6 % of GDP.[154]

Diagram 1.6 Public expenditure invested into support for health.[155] Source: MH CR, upon personal request.



Sufficient numbers of medical personnel but not across all fields, and poor age demograhics

858. According to IHIS[156] analyses, the number of physicians in the Czech Republic is currently stable - active employments are slightly increasing (1.4 % annually). The estimated shortage of at least 1,000 physicians is covered by overtime, increasing caseloads, etc. Nurses are already experiencing a drop in active employment in the care sector, especially in acute care. This long-term trend is partly caused by the emerging shortage of nurses, but mainly due to the movement of nurses from inpatient care to outpatient care (the number of nurses there is eventually growing). This may lead to crisis situations in some regions. According to the Ministry of Health's predictive models, the age distribution profile of physicians is not favourable. For some specialties, there are clear demographic threats (average age over 57) and it will be necessary to improve such age demographics. By 2019, the expected numbers of medical school graduates will cover decreases due to the retirement of

[153] MH CR (2014) *Zdraví 2020.*
[154] OECD (2016) *Health at a Glance Europe 2016*.
[155] It does not include the costs of MH grant programs in the range of approx. 23 billion CZK (for 2016).
[156] DUŠEK, L.; BARTŮŇKOVÁ, M.; MUŽÍK, J. (2016) *Personální kapacity lékařů v rezortu zdravotnictví – predikce potřeb.*

older doctors. Beyond this, the prediction shows a decrease in the number of doctors; it will be necessary to increase the number of medical school graduates.

1.6 Culture

Underestimating cultural and media policy is a risk

859. Social cohesion is at risk because of underestimation of the state's policy on culture and media. In particular, the resignation of the state to exert influence on aesthetic and ethical education, the development of cultural audiences' competences and media literacy and on the pressure to maintain a high level of media quality is particularly threatening. However, the neglect of care for building and maintaining a nationally-based cultural identity is equally serious. Diversified, high-quality cultural and artistic creations and cultural contact with foreign countries are developing successfully, although often without public support. The legacy of the 1990s has left us questioning the legitimacy of cultural policy and the ideological emphasis on the priority of private ownership at the expense of recognising the need to protect and promote shared cultural values. There is also a prevailing notion of the necessity to produce financial gain in culture and art, and even mistaken arguments have emerged linking cultural support with unauthorised influence on economic competition. Minority cultural policy still relates to outdated constructs of minority ethnicity and does not distinguish between the need to maintain the cultural identity of indigenous ethnicities on the one hand and the need for cultural integration of newly arrived minorities on the other.

Lack of financial resources

860. The promotion of objectives and tasks of the state's cultural policy have long been constrained by the lack of funding for their implementation, which is related to the overall underfinancing of the cultural sector and the absence of alternative sources. The state has no mechanisms in place to use new and viable cultural initiatives to renew and expand the institutional structure of cultural life.

The majority of those employed in the culture sector receive below-average salaries

861. In 2014, approximately 150,000 people were working in the culture sector. This number included not only the employed but also volunteers, contract workers, self-employed people and those classed as having another type of employment. The number of employees alone was 80,740, which is approximately 2.1 % of the total number of employees in the economy. The number of people working in the field of culture has not changed significantly since 2012, but there is an increasing trend in the number of people employed in the sector with lower than average salaries.[157] The average salary was slightly below the national average in 2014. Nevertheless, significant differences can be observed across sectors. In the audiovisual and interactive technology sector, the average monthly income was higher than CZK 40,000, whereas the average monthly salary was not even half this amount in the cultural heritage sector. Overall, more

[157] Traced data from the results of the Czech Republic Cultural Account for the years 2011–2014. CZSO; NIPOS (2016) *Výsledky účtu kultury ČR za rok 2014.*

than 77 % of those employed in the culture sector work in sectors with salaries lower than the national average salary.[158]

Interest in culture is rising as well as public investment in it

862. Since 2011, there has been a gradual increase in the amount of financial investment in the culture sector. In 2014, nearly CZK 35.9 billion was allocated from public budgets to culture (including culture associated with churches and religious societies) which represented a year-on-year increase of 3.6 %. Overall, about 2.15 % of public budgets have been allocated to culture. However, the increasing volume of public funds must be used efficiently. From a macroeconomic perspective, culture accounted for about 1.4 % of GDP in 2014, which has not changed significantly since 2010.[159] A positive development was recorded in terms of total visitor numbers to cultural institutions, which grew by 5.7 % between 2013 and 2014, which is partly due to public access to monuments. There is also a growing number of cultural events taking place in the Czech Republic.[160]

[158] CZSO; NIPOS (2016) *Výsledky účtu kultury ČR za rok 2014.*
[159] CZSO; NIPOS (2016). *Výsledky účtu kultury ČR za rok 2014.*
[160] NIPOS (2016) *Kultura České republiky v číslech.*

2 Economic model

2.1 Economic institutions

The Czech Republic plays in the second European league of economic performance

863. The position of the Czech economy between Western and Eastern Europe has not changed over the past 200 years.[161] The Czech Republic is at the helm of an imaginary peloton of former post-communist states, but the EU's economic core countries (Germany, the Benelux countries, France and the United Kingdom) are way ahead.

The Czech economy is heavily influenced by developments abroad

864. The Czech Republic is an open, medium-sized economy within the EU, which is sensitive to developments in the global economy. It falls within a group of countries economically linked to Germany which has been our business partner for a long time. If our business partners were ranked according to the volume of trade, the volume of German imports to us is greater than the two following countries put together and the volume of exports to Germany is even greater than the three following countries put together. Almost half of all non-financial enterprises and almost the entire banking sector are owned by multinational companies. The dependence of the Czech Republic on foreign resources is well illustrated, for example, in the area of research and development. One third of resources come from European funds, and one third of the value comes from projects implemented in companies with a foreign owner.

In 2015, the Czech economy returned to the pre-crisis economic level of 2008

865. The economic performance, measured by means of gross domestic product (GDP), which is a monetary expression of the value of goods and services generated in a given period in the territory, grew slightly before joining the EU in 2004. In 2004-2007, strong economic growth reached a peak. Between 2009 and 2014 there was a fall and stagnation in economic performance as a result of the global crisis and domestic fiscal policy. In 2015, GDP grew significantly again thanks to the low commodity prices and a one-off drawdown of European subsidies.[162] At that time, real GDP per capita, that is to say the economic performance of the country, reached the 2008 level again, after subtracting the influence of statistics on changing prices.

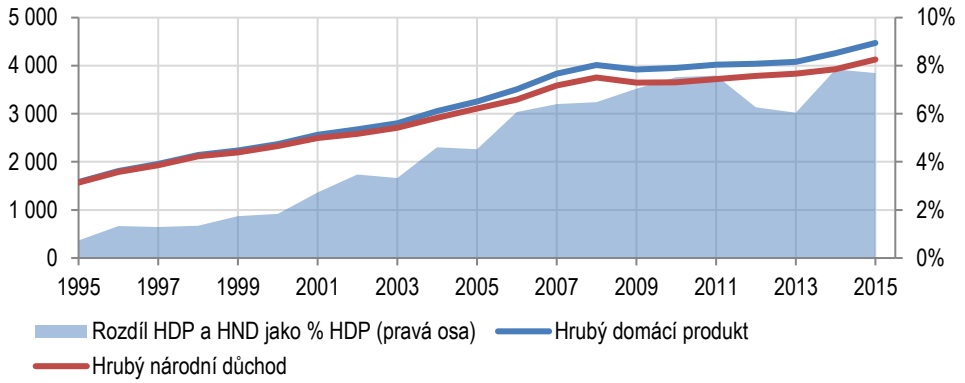
Eight percent of GDP created in the Czech Republic is not spent in the Czech Republic but abroad

866. In addition to the economic performance of measured GDP, an income view of macroeconomic reality is also important. Gross national income (GNI) shows the volume of primary income from both labour and capital from the domestic economy as well as from foreign countries which provide work/income for Czech residents. The difference between GDP and GNI is determined by the balance of primary incomes with foreign countries, i.e. the difference between wages and profits of Czech entities from abroad on the one hand and wages of non-residents in the Czech Republic and profits of foreign owners in the Czech economy on the other. The difference between GDP and GNI in the Czech Republic is increasing.

[161] GGDC (2013) *The Maddison-Project.*
[162] OECD (2016) *Economic Survey of Czech Republic 2016.*

The average GDP growth rate between 1995-2015 was 5.3 %, while GNI was only 5 %. In 2015, GNI was already almost 8 % lower than GDP, the third highest figure in the EU28 apart from Luxembourg and Ireland, which have an exceptional economic structure with a very high proportion of foreign companies. The gross national income indicator, i.e. the volume of goods and services consumed and invested in the economy, is an important complement to the GDP indicator (see Diagram 2.1).

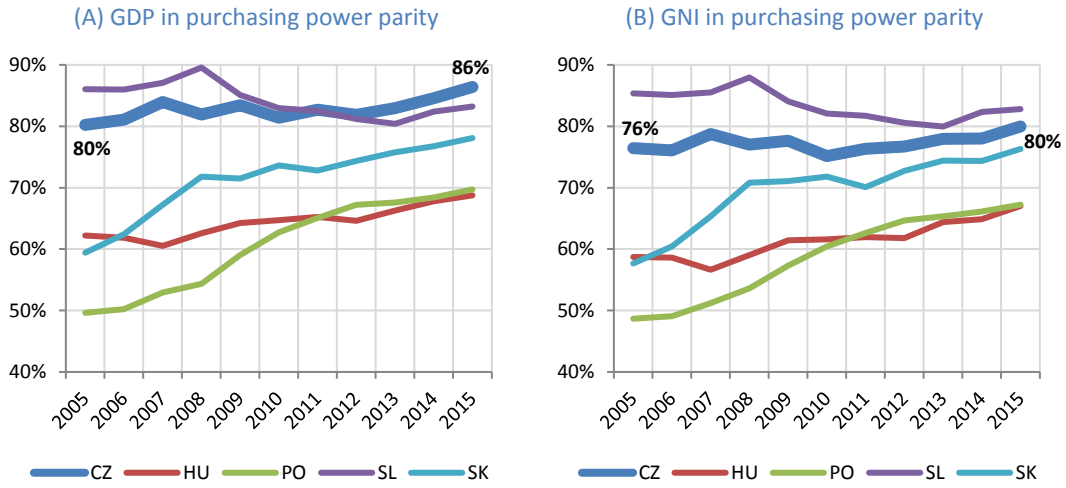
Diagram 2.1 Gross domestic product, gross national income and their difference as a percentage of GDP [CZK billions in current prices]. Source: EC. Database AMECO. *European Commission* [online].

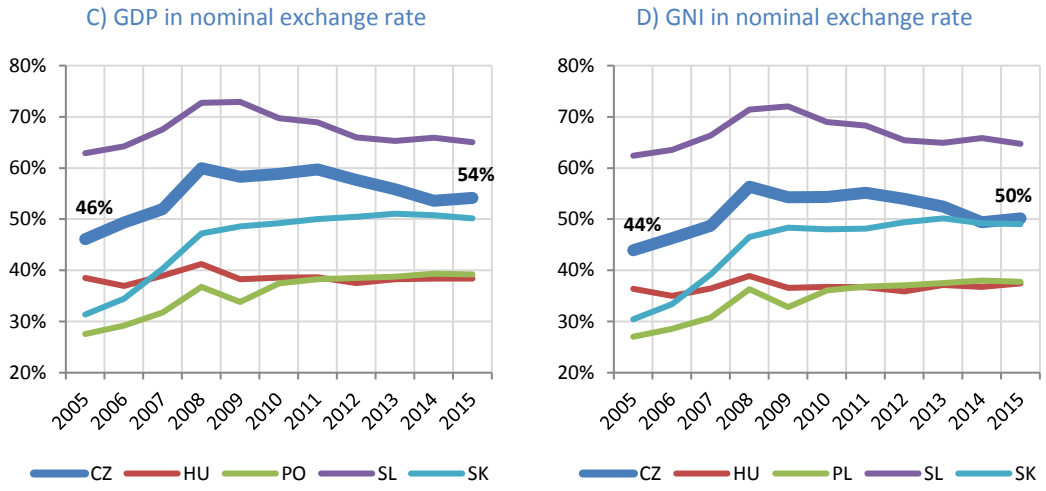


Since joining the EU, the Czech Republic has moved slightly closer to the average economic level of the EU

867. The Czech Republic has moved closer to the average EU economic level between the years 2005 and 2015, measured in GDP per capita in purchasing power parity (adjusted for different price levels, see Diagram 2.2, sections [a] and [b]) and the exchange rate (sections [c] and [d]). CR ranks as the 16th country in terms of GDP per capita measured in purchasing power parity, and the 15th in terms of GNI in the EU.

Diagram 2.2 Relative economic level. [At current prices per purchasing power parity per person, EU28 = 100 %]. Source: EC. Database AMECO. *European Commission* [online], our own calculations.

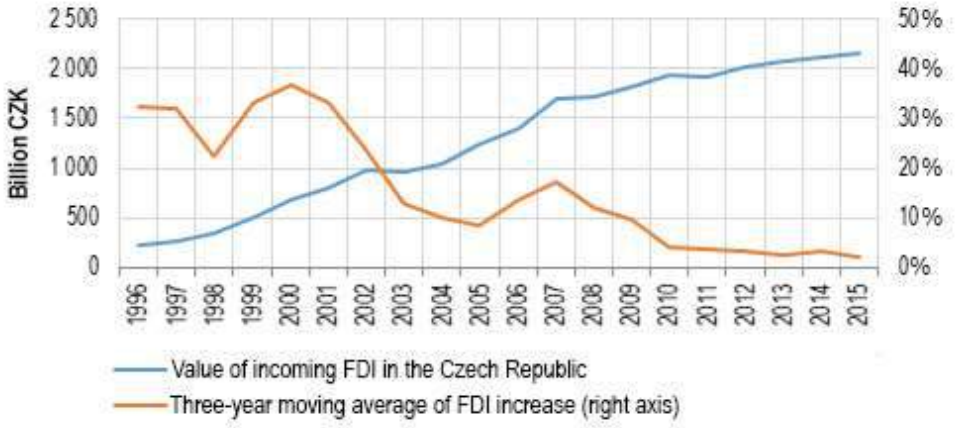




Investment from abroad was the main factor contributing to strong growth

868. Strong economic growth between 2000 and 2008 was mainly driven by the inflow of foreign direct investment (FDI). Foreign companies bought shares in Czech companies as well as investing in production in our country "from scratch". They also brought capital, *know-how* and corporate culture with them. It was an exceptional situation which is unlikely to ever be repeated in the near future. It led to the Czech Republic's incremental involvement in global economic chains. Investors have used growth potential and achieved high returns in fast-growing economies (see Diagram 2.1 to 2008). However, these profitable investment opportunities are now exhausted and FDI growth is decreasing, as illustrated in Diagram 2.3.

Diagram 2.3 The value of foreign direct investment in the Czech Republic and its increase. Source: CNB. ARAD Database. *CNB* [online]; our own calculation.

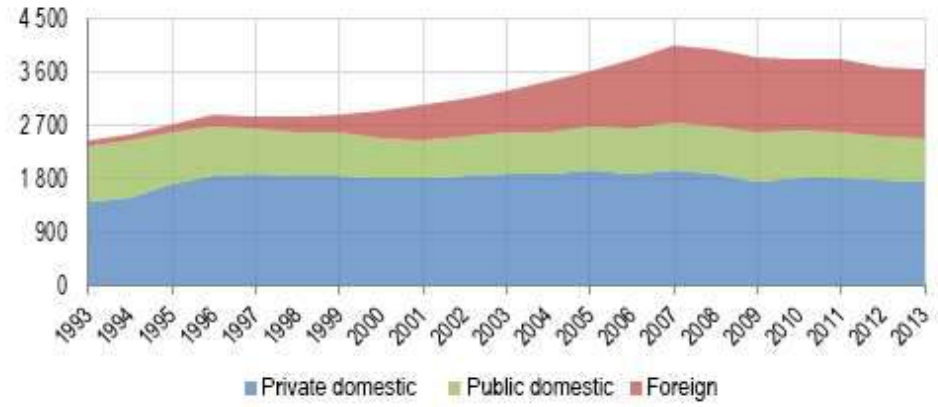


The domestic economy has grown very little since 1993

869. Evidence of growth driven by foreign investment is also the ownership structure of gross value added (GVA), i.e. the difference between the value of the company's own production and the resources and semi-finished goods that it does not produce itself and must therefore purchase. Diagram 2.4 shows that the production of GVA in both domestic sectors, public and private, adjusted for inflation, is almost unchanged. The

growth of GVA since 1996 has mainly been linked to companies under foreign ownership (red in the diagram). GVA is statistically almost identical to GDP; in the Czech Republic, it accounts for approximately 90 % of GDP in the long-term perspective.

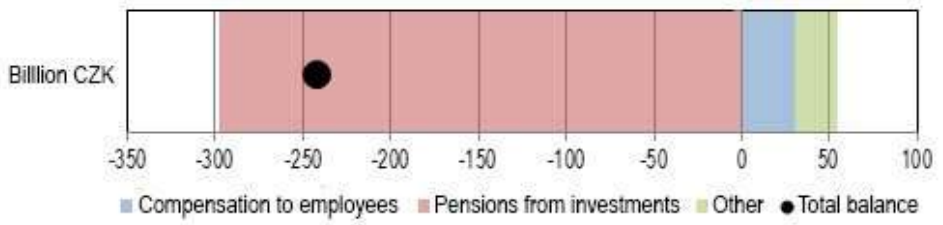
Diagram 2.4 Composition of gross value added (at constant prices by deflator) by ownership [bill. CZK] Source: CZSO, National Accounts Database *CZSO* [online]; our own calculation.



Foreign companies are an important element of the Czech economy

870. The scope of business with foreign owners in the Czech Republic illustrates the balance of primary incomes. This arises when we compare the income of Czech citizens and companies from abroad with the income of foreign citizens and companies from the Czech Republic. As a result, Czechs earn more in terms of wages and in the category "Others" abroad than foreigners in the Czech Republic; on the contrary, foreign owners will receive significantly more dividends and profits from the Czech Republic than Czech owners of companies and capital in general from abroad. The difference is almost 300 billion CZK, i.e. about 6.7 % of GDP (see Diagram 2.5). Foreign investment brings new *know-how* and the ability to engage in transnational value chains. Foreign companies are also the largest individual corporation tax payers. In 2014, out of the 20 largest corporation tax payers, 16 were foreign companies. Altogether these 16 companies paid almost CZK 23 billion, i.e. almost 28 % of the total tax paid in the given year.[163]

Diagram 2.5 Balance of primary pensions by type of pension in 2015. The negative number refers to the outflow abroad, the resulting numbers being a partial balance (net). Source: CNB, ARAD Database. *CNB* [online].

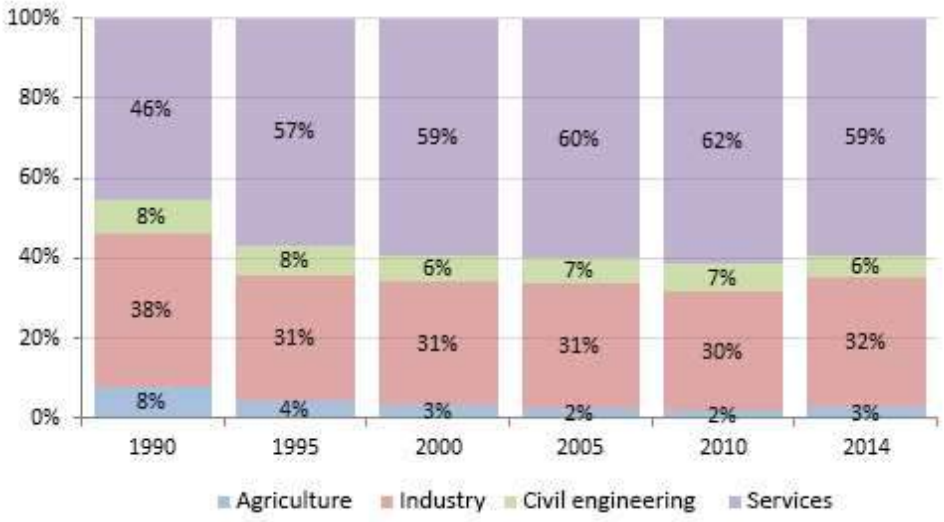


[163] MoF CR (2016) *Ocenění si převzala dvacítka TOP plátců daně z příjmů*.

Following the depression, growth in labour productivity has slowed from an average of 8 % to 2 % per year

871. In the last two decades, the Czech Republic has witnessed significant growth in labour productivity. Labour productivity is simply calculated as GDP distributed across the number of hours worked by all workers in the economy. It does not therefore describe work efficiency directly, but the financial value of the product per one hour worked. It increased from a nominal value of approximately CZK 166 per hour worked in 1995 to almost triple the value (CZK 485) in 2015.[164] At first, rapid real productivity growth, which at the turn of the millennium reached 3.8 % a year, slowed considerably after the depression in 2008 and stood at an average of 1.0 % per year. Compared with Germany, the Czech Republic has shifted from around 46 % in 1995 to 58 % in 2015.

Diagram 2.6 Sectoral structure of gross value added at current prices between 1990 and 2014. Source: CZSO, National Accounts Database *CZSO* [online].



The Czech Republic is an economy of services but with a high share of industry

872. The sectoral structure of the economy can be expressed in terms of its basic sectors - services, industry, construction and agriculture - in GVA. The largest part of the added value in the Czech economy is created by services, especially the financial sector. They are followed by industry, civil engineering and finally agriculture (see Diagram 2.6). The proportion of services in GVA over the last 25 years has increased by 13 percentage points (pp.), at the expense of the decline in the proportion of industry (6 pp.), agriculture (by 5 pp.) and civil engineering (by 2 pp.). The main structural changes took place in the first half of the 1990s, and the sectoral ratios have changed little since. The share of industry in GVA is highest in the Czech Republic when compared to the whole of the European Union (see Diagram 2.12 below).

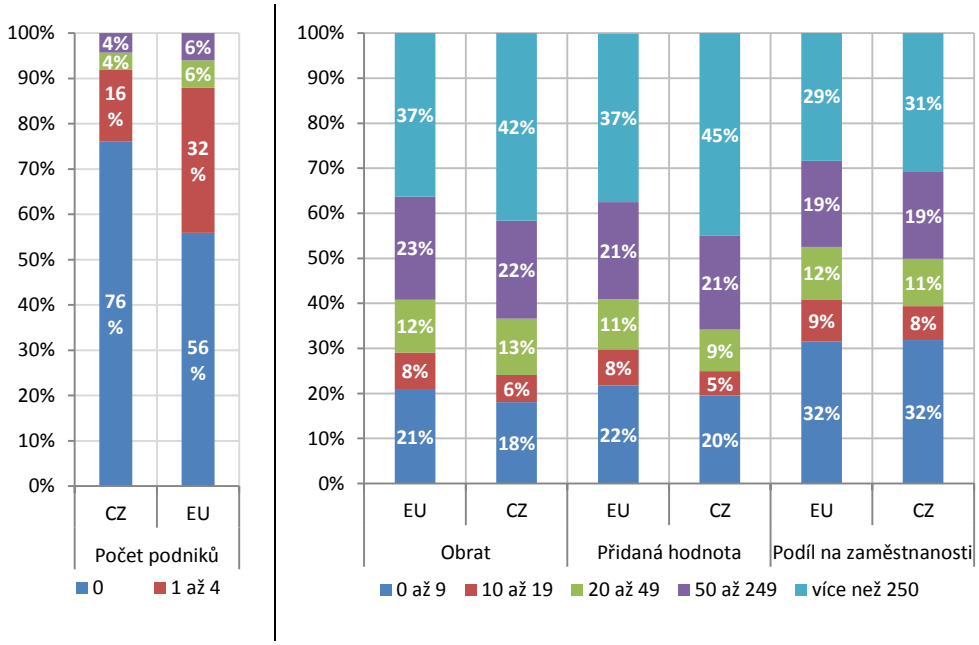
Big businesses form the backbone of the Czech economy

873. In comparison with the rest of the European Union, the Czech economy is characterised by an above-average proportion of large enterprises (over 250 employees) in terms of employment rate, and above all in terms of value added (Diagram 2.7). On the contrary, the role of small

[164] EC. Database AMECO. *European Commission* [online]. Item: *Gross domestic product at current prices per hour worked* (GDPDH).

and medium-sized enterprises (between 10 and 250 employees) is below average. Micro-enterprises with less than 10 employees (including the self-employed) create slightly less value added than the European average, but account for 96 % of all enterprises. Seventy-six percent of all Czech companies have no employees (technically they are self-employed persons), compared to the European average of 56 %. However, not every self-employed person has full-time or year-round employment; thousands of employees have a second job using a trade licence.

Diagram 2.7 Structure of enterprises by number of employed in the CR and comparison with the EU28 average (2013). Source: EUROSTAT. Dataset Annual enterprise statistics by size class for special aggregates of activities (NACE Rev. 2). *Eurostat* [online].

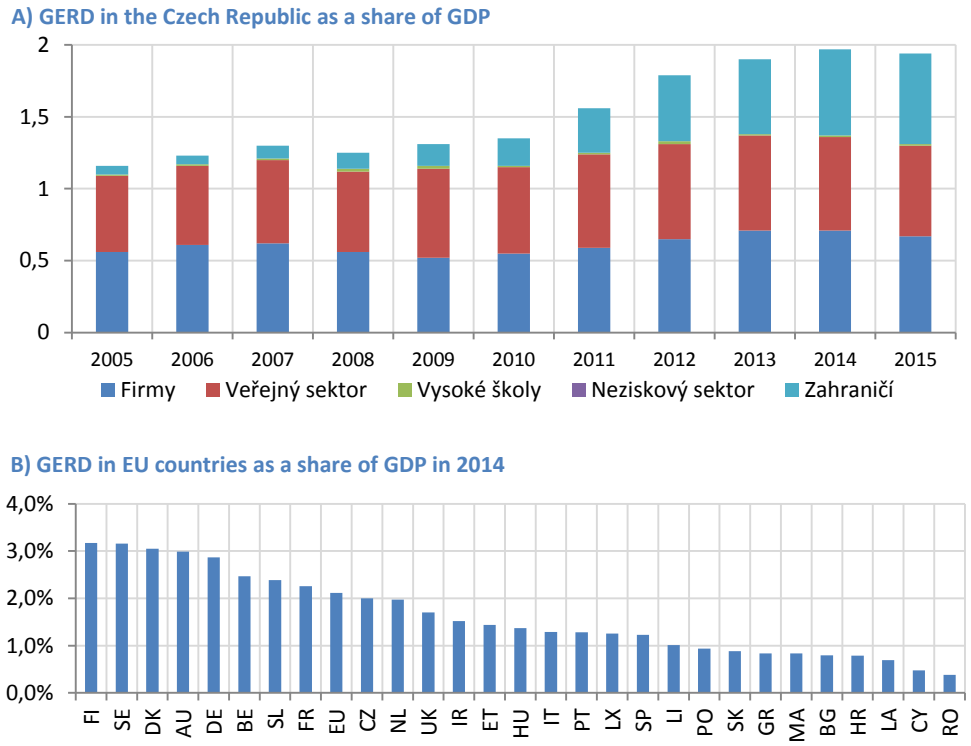


2.2 Innovation

Thanks to EU subsidies, R&D expenditure has increased

874. In recent years, the Czech Republic has significantly increased total R&D expenditure (GERD). It has risen from less than 1.5 % of GDP in 2010 to almost 2.0 % in 2014 and 2015 (see Diagram 2.8, part A). Thus, we have reached the ninth position in the European Union (see Diagram 2.8 b) sitting just below the EU average. The main factor contributing to the growth of R&D expenditure between 2011 and 2013 was the increase in the use of EU funds. The Czech Republic uses more European funds for research and development (€ 45 per capita per year) than any other EU country.

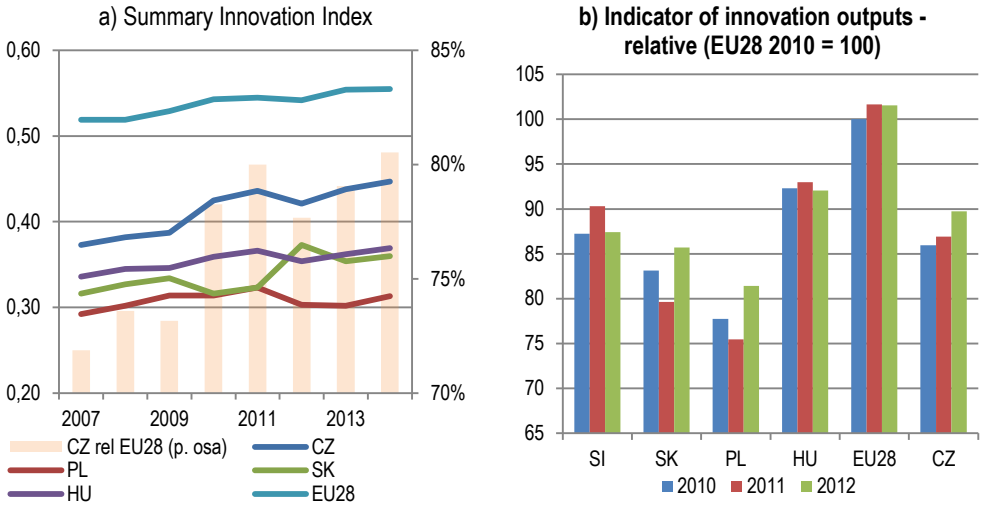
Diagram 2.8 Total expenditure on research and development as a percentage of GDP (GERD) in the Czech Republic and EU countries. Source: EUROSTAT. Dataset Total intramural R&D expenditure (GERD) by sectors of performance. *Eurostat* [online].



Combined R&D results are not impressive, but they are improving

875. One of the benchmarks for the use of R&D expenditure is the innovation index. The development of the summary part of the innovation index for the Czech Republic has been positive since 2007 both in the value of the indicator and in the relative position vis-à-vis the EU28, which exceeded 80 % in 2014. Diagram 2.9 shows the development of the Summary Innovation Index in part (a) and the development of the complementary Innovation Output Indicator in part (b).

Diagram 2.9 Evaluation of outputs and structure of R&D in the Czech Republic. Sources: EC. The Innovation Union Scoreboard*. European Commission* [online] and EC. Innovation Output Indicator*. European Commission* [online], our own processing.



The majority of expenditure on research in the business sector is related to the automotive industry

876. The largest share of R&D expenditure in the business sector is attributable to industry (59 %), mainly automotive, engineering and electrical engineering; these are followed by information and communication activities (17 %).[165] Foreign-owned companies contribute the most investment in terms of resources and workers for R&D.

Activity and types of research support in enterprises

877. Public support for research and development of business sector entities is twofold: direct through subsidies aimed at specific projects and in the form of institutional support and indirect tax relief. Indirect support is used in two-thirds of cases by large enterprises (over 250 employees), which often have a foreign owner. Conversely, direct support is mostly targeted at small and medium-sized enterprises, which tend to be in domestic ownership. Less than half of all companies with more than 10 employees work on their own research activity; in Germany, this is the case with two out of three such companies.[166]

2.3 Source management and infrastructure

The Czech economy is resource-intensive, although it is improving

878. Efficiency in the use of material resources can be expressed as the source productivity or value of the product the economy creates with a limited amount of resources. Between 2004 and 2014, the Czech Republic doubled its source productivity[167] from a value of EUR 0.5 per product of one kilogram of material resources in 2004 to EUR 1 in 2014. Nevertheless, when compared to the EU28 countries, the Czech Republic compares poorly, ranking 20th or 21st (2004 and 2014, respectively) in source productivity.[168] The following graphs show the material productivity of the

[165] CZSO (2016) *Ukazatele výzkumu a vývoje za rok 2015.* Chart 97, pp. 134.
[166] CZSO (2016) *Inovační aktivity podniků v ČR 2012-2014*, pp. 22 and 41.
[167] The latest available data is for the year 2014.
[168] EUROSTAT. Dataset Resource productivity. *Eurostat*. [online].

Czech Republic in an international comparison (Diagram 2.10) and the development of this productivity (Diagram 2.11).

Diagram 2.10 Indicative comparison of material productivity of EU countries, GDP in PPP / DMC [€ (PPS) / kg]. Source: EUROSTAT. Dataset Resource productivity. *Eurostat* [online].

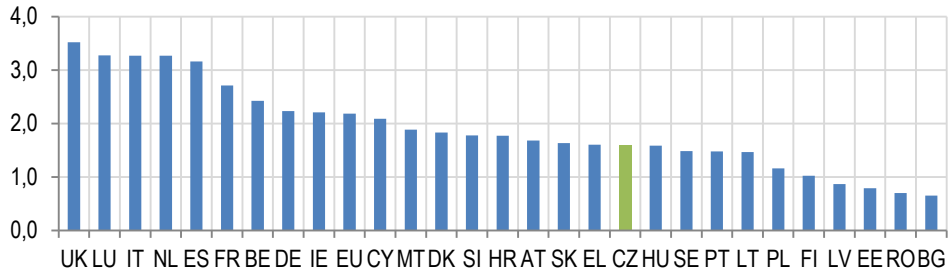
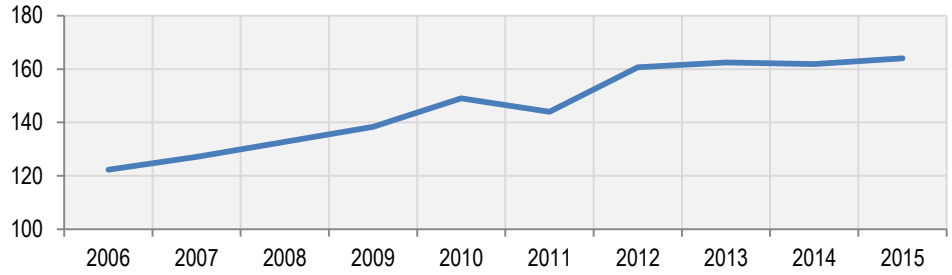


Diagram 2.11 Material productivity of the Czech Republic, Index (2000 = 100). Source: EUROSTAT. Dataset Resource productivity. *Eurostat* [online].



Waste and circular economy

879. Recycling reduces the consumption of new material. There is no direct indicator of the economy's recycling rate. However, the comparison of several available indicators, namely the production of secondary raw materials and the production of waste against the total material input (DMI) can be compared together and against each other. The data on secondary raw materials has been monitored since 2011. Chart 2.1 shows these ratios at the bottom. However, it is only a comparison of volumes; these categories are not mutually exclusive subsets (the secondary raw materials did not account for 78.8 % of the waste; this quantity was only the volume). The production of secondary raw materials accounts for approximately 8 % to 9 % of total domestic consumption of materials (own mining + import - export) over the whole monitored period.

Chart 2.1 Basic statistics of material economy, data in tonnes. Source: CZSO (2016) *Účty materiálových toků (vybrané indikátory) – 2015* and CZSO (2016) *Produkce, využití a odstranění odpadů – 2015.* [169]

	2011	2012	2013	2014	2015
Production of secondary raw materials	21 241 161	20 788 673	18 721 648	18 753 555	20 405 028
Total waste production	23 576 396	23 435 996	23 724 147	23 788 925	26 946 718
Domestic material input (DMI)	242 402 861	223 728 276	222 860 242	230 215 458	236 742 394

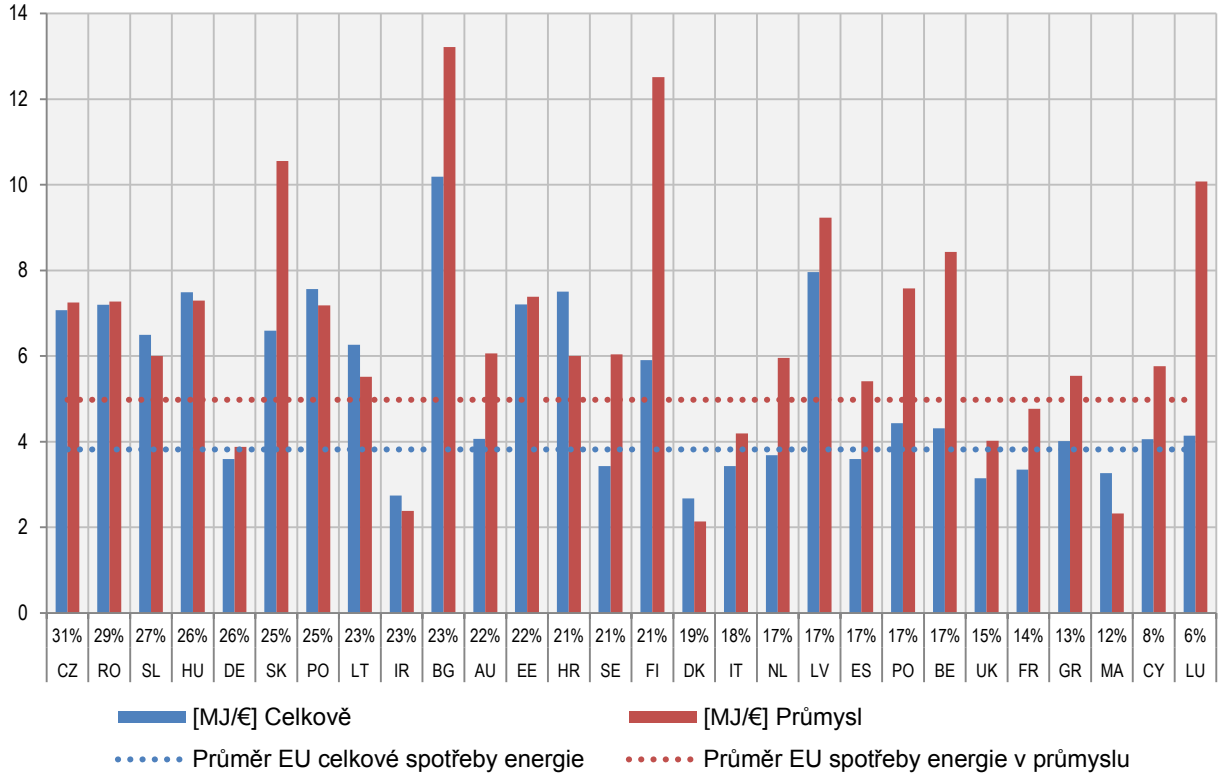
[169] Data on the production of secondary raw materials before 2011 is not completely comparable.

Ratio of production of secondary raw materials and waste production	90.1%	88.7%	78.9%	78.8%	75.7%
Ratio of production of secondary raw materials and DMI	8.8%	9.3%	8.4%	8.1%	8.6%
Ratio of waste production and DMI	9.7%	10.5%	10.6%	10.3%	11.4%

The energy intensity of the Czech economy correlates with the high share of industry

880. The Czech Republic is the country with the highest proportion of industry to GVA in the EU28. It falls within countries with an economy above average in terms of energy, but not extremely demanding. Germany stands out from comparable industrialised countries as its proportion of industry in GVA is lower by 5 pp., but its energy consumption for the production of EUR 1 of industrial value is almost half in comparison to the Czech Republic (see Diagram 2.12).

Diagram 2.12 Energy demand for the production of EUR 1 GVA in EU28 [MJ / €] in 2013.[170] Source: EUROSTAT. Dataset National Accounts aggregates by industry (up to NACE A*64). *Eurostat* [online] and EUROSTAT. Dataset simplified energy balances – annual data. *Eurostat* [online]



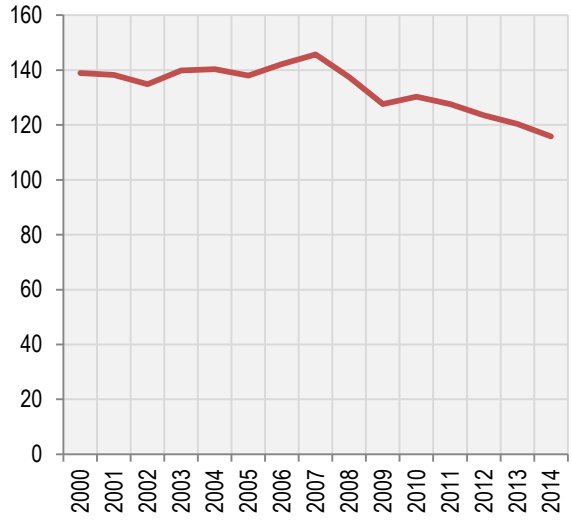
[170] The percentage numbers below the horizontal axis show the industry's contribution to GVA in the given country. The countries are ranked downwards according to the industry contribution to GVA.

Success in reducing greenhouse gas emissions, but CR is still twice as high compared to EU in terms of GDP

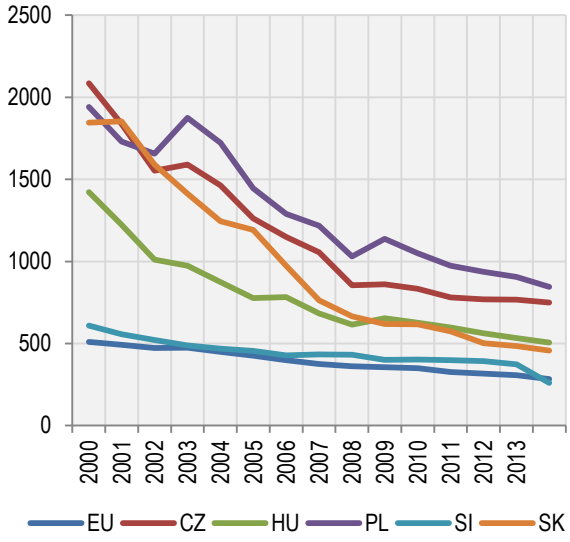
881. A large share of industry is also one of the reasons why the Czech economy releases relatively high greenhouse gas emissions per GDP euro produced. Due to strong GDP growth, this relative intensity in 2000-2008 has decreased without reducing the volume of discharged pollution. At that time, a series of structural changes took place. Shortly before, the environmental legislation in the early 1990s took effect, the Czech Republic joined the EU, and thanks to foreign investment, more modern technologies came into industry. Due to the stagnation of economic growth, this trend stopped after 2008, although emissions declined. Recovery will require costly structural changes, including the combination of fossil energy abandonment and productivity growth. Some parts of the country also continue to suffer from high levels of air pollution from harmful emissions from industrial plants (see Municipalities and Regions).

Diagram 2.13 Development of the volume of emissions and the Czech economy's intensity in terms of greenhouse gas emissions. Source: EUROSTAT. Dataset Greenhouse Gas Emissions (source: EEA). *Eurostat* [online] and EC, Database AMECO. *European Commission* [online].

A) Physical volume of greenhouse gas emissions in the Czech Republic [mt]



B) GHG emissions per unit of GDP [t CO_2 eq. / €1000 HDP]



Characteristics of Czech energy industry

882. For historical and economic reasons, electricity production in the Czech Republic is based on domestic sources, i.e. coal and nuclear energy. The main external factor influencing the form of Czech electricity is thus not so much the issue of resources, but the energy policy implemented at EU and national level and in individual member countries. The international community has agreed to gradually reduce greenhouse gas emissions, including fossil fuel consumption.[171] EU countries are loosening restrictions governing the electricity and gas markets; they have also

[171] The goal SDG 13 in UN (2015) *Transforming Our World*; UN (2015) *Paris Agreement*.

agreed on a common energy policy and climate policy.[172] Domestic decisions taken in some countries - especially Germany's *Energiewende*[173] - also have a significant impact on the market in other countries, including the Czech Republic. Technological innovations have been gradually transforming the Czech energy industry and will continue to do so. For example, decentralised energy production is becoming more competitive, affecting the economic decisions of some households and firms. Decentralisation of electricity production has three main causes. Small-scale production is increasing due to the spread of new technologies, especially renewable resources. Small local resources are often perceived as an enhancement to security and an advantage to the local economy. It is also deliberately supported by both European and national legislation.

Carbon-intensive energy on the decline

883. The external influences on the Czech energy industry have led to a demand to reduce the consumption of fossil fuels. This can be achieved in several ways, in particular by increasing the share of energy production from renewable or nuclear sources and by increasing energy efficiency. The energy market is also changing. Market liberalisation as well as the promotion of renewable resources currently disadvantage investment-intensive projects, especially nuclear power plants. Today, they are not profitable without state support. The coal energy industry is now facing and will continue to face the need to reduce emissions and compensate for the externalities it causes.

Potential to increase energy efficiency

884. There are opportunities to improve energy efficiency in many areas; such improvements would also make economic sense. They include heating (which accounts for 76 % of energy consumption in households[174], potential totalling 350 PJ, out of which 100 PJ is heat[175] supply systems and 250 PJ households[176]), unnecessarily high production above the necessary system reserve and export of electricity (where the export balance without the system reserve 54 PJ[177]) or the shift of passenger car traffic in cities to public transport (collectively for the transport potential of 240 PJ[178]).

Transportation connections to other countries need improvement

885. The transportation infrastructure has historically defined structural features. The motorway network is concentrated in the western part of the Czech Republic running from the regions towards Prague. With the exception of the route heading to Vienna, an efficient rail network has not failed to break the boundaries of the Iron Curtain, and so the connections to the West, Southwest and North are relatively underdeveloped compared to the East and Southeast.

[172] Also expressed in EC (2010) *2020 Energy Strategy*, EC (2015) *Rámec politiky v oblasti klimatu a energetiky v období 2020–2030*.
[173] See e.g. in: ČERNOCH, F.; OSIČKA, J.; ACH-HÜBNER, R.; DANČÁK, B. (2015) *Energiewende*.
[174] CZSO (2004) *Šetření ENERGO 2004*. The results of the contemporary ENERGO 2015 research were not available prior to the finishing of this document.
[175] MIT CR (2015) *Státní energetická koncepce*.
[176] MRD CR (2015) *Vybrané údaje o bydlení 2015.*
[177] ERO (2015) *Roční zpráva o provozu ES ČR.*
[178] MIT CR (2015) *Státní energetická koncepce* uvádí potenciál 240 PJ souhrnně pro dopravu.

Roads and motorways

886. The road network is defined by the following benefits: high road network density, a developed motorway network for national transportation and the linking of major cities to the motorway network. On the contrary, there is an insufficient motorway network in the north-south direction, there is no connection between the South Bohemian and Pardubice regions, the radial directions are not sufficiently tied to the state border or connected to neighbouring countries. Another problem is that the repairs have been underfinanced over many years.

Railway network

887. The basic railway network has a very high density with optimal distribution, and the completed transit corridors are connected to the European railway network. However, the main routes in the East-West direction take it close to its capacity, and we are still awaiting the scheduled construction of high-speed lines for passenger transportation in the direction of Prague - Brno - Ostrava / Vienna and the connection to the European network (especially in Germany).

Water supply infrastructure

888. To avoid disrupting the functioning of groundwater and underground drinking water resources with sufficient hydraulic efficiency of drinking water systems and local water supply systems in towns and municipalities, the water supply infrastructure is currently only able to fulfil standard operational tasks. The Czech Republic is open to access to the ownership or operation of various types of technical infrastructure, including the water supply infrastructure. As a result, there was a significant shift in the strategic decision-making on the use of irreplaceable media for the function of supplying cities and municipalities with drinking water in the late 20th century.

2.4 Public finance system

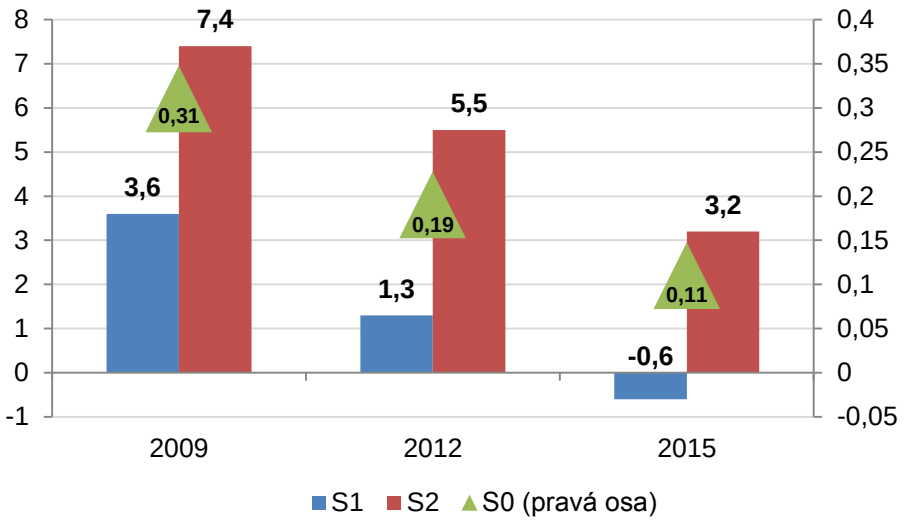
Sustainability of public debt rated as low or medium-risk

889. One possible measure of sustainability of public finances is the sustainability aspect of public debt. In its publications on fiscal sustainability, the European Commission introduces short, medium and long-term indicators. According to this benchmark, the outlook for the Czech fiscal system is assessed as low-risk or non-risk in the short and medium term and as medium-risk in the long term.[179] S0 is a warning indicator of public finance stability for a short period of one year. It refers to the critical level calculated for each country and time (for the Czech Republic 0.43 in 2015 and 0.44 in 2011). Indicators S1 and S2 are expressed as a percentage of GDP and indicate how much public budgets need to increase revenue and/or reduce spending in the medium or long term. Negative values (as in the case of the S1 indicator in 2015) indicate that the sustainability criteria set are met. The country has a reserve for a possible decline in general public finance.

Diagram 2.14 Indicators of fiscal sustainability. The lower the value, the higher the sustainability. Sources: EK (2009) *Sustainability Report 2009*, pp. 96–97; EK (2012)

[179] EC (2016) *Fiscal Sustainability Report 2015*, pp. 109-110.

***Fiscal Sustainability Report 2012* pp. 89–90 a EK (2016) *Fiscal Sustainability Report 2015*, pp. 109–110.**



Public expenditure is one of the least effectively spent expenditures in the EU

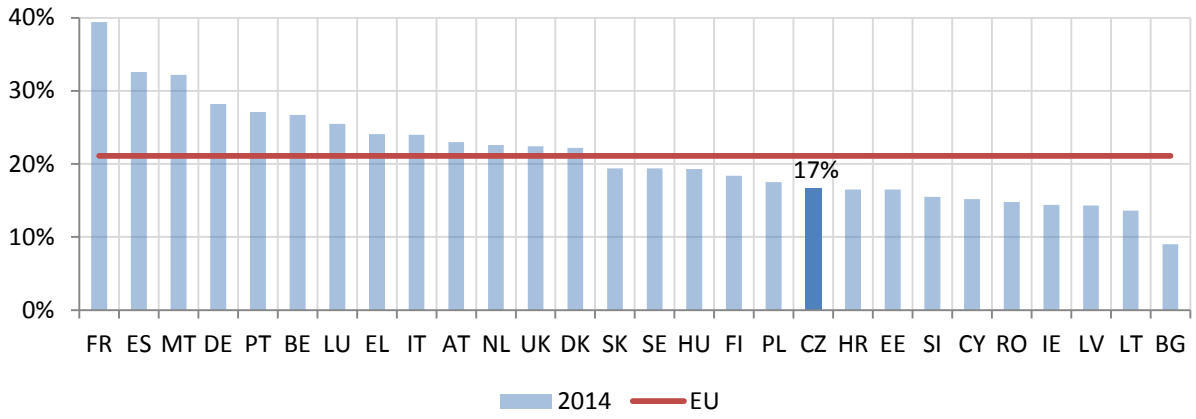
890. The efficiency of public finance management in the Czech Republic is rated as one of the lowest in the EU.[180] The main objections are *ad hoc* interventions in the budgets, limited expenditure ceilings or lack of independent expenditure control. The OECD also mentions[181] wasteful *procurement*, poor coordination of cross-sector investment projects, and excessive fragmentation of local governments, which makes it difficult to achieve economies of scale.[182]

In the Czech Republic, taxes are lower than the EU average

891. Tax rates in the Czech Republic are considered relatively low in the European Union. The actual income tax rate, after deducting all the benefits received by taxpayers (so-called average effective tax rate - calculated as the average of both income taxes), was 17 % in 2012, four percentage points below the EU average (see Diagram 2.15).[183]

[180] For the latest rate, see EC (2016) *Zpráva o České republice 2016*, section 2.2.
[181] OECD (2016) *OECD Economic surveys: Czech Republic 2016.*
[182] Savings on the scale mean that the unitary (average) price decreases with the growing quantity of product or service.
[183] See EC (2016) *Taxation Trends in the European Union*, pp. 146.

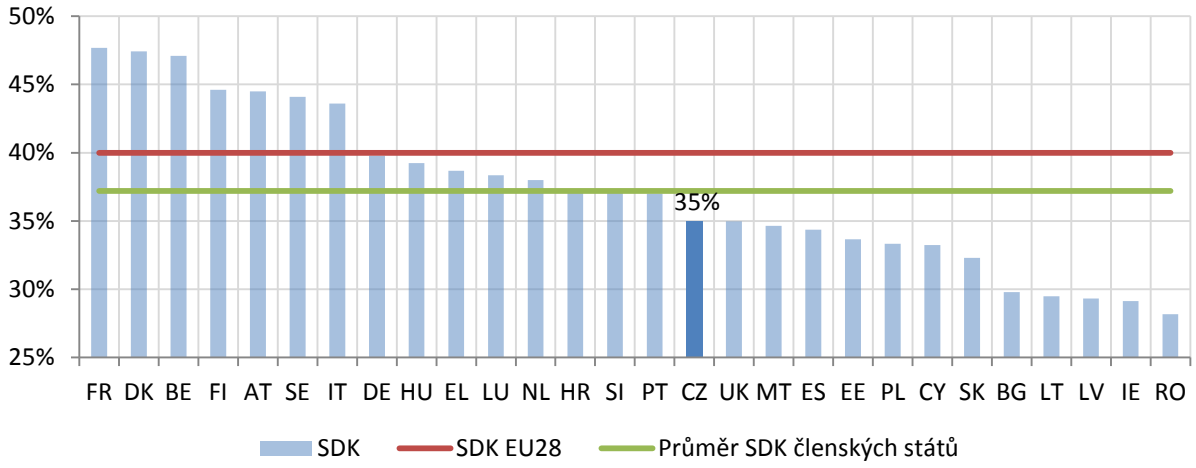
Diagram 2.15 Average effective tax rate, comparison within EU28. Source: EC (2015) *Taxation Trends in the European Union*, pp. 146, our own processing.



The volume of resources collected in tax equates to the EU average

892. Compared to the proportion of GDP formed by all tax collected (so-called compound tax quota – CTQ), the Czech Republic is lower than the EU average. At 35 %, the Czech Republic ranks 16th in the Union - two percentage points below the arithmetic mean of all member states and five percentage points below the compounded EU tax quota as a whole (see Diagram 2.16).

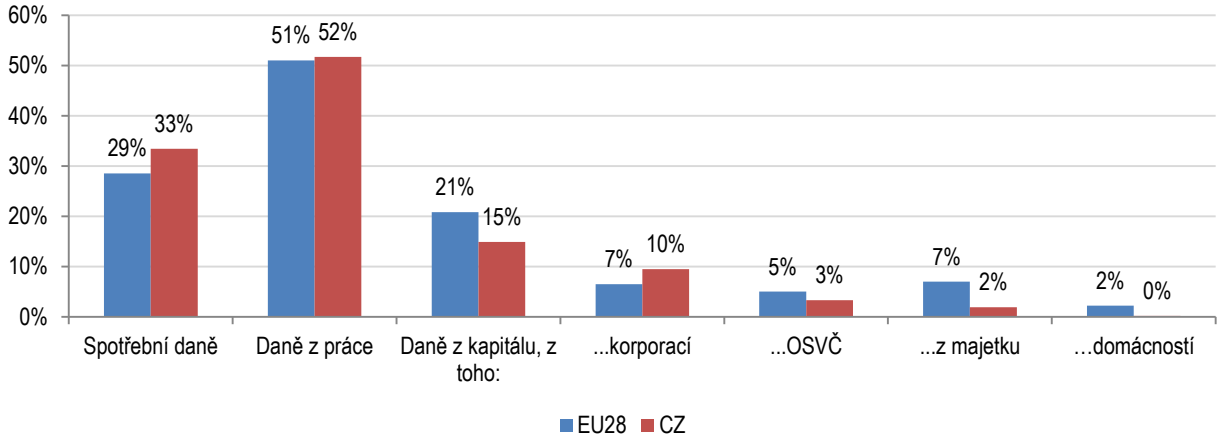
Diagram 2.16 Compound tax quota expressed as a portion of GDP. Source: EC. Database AMECO. European Commission [online].



In comparison with the EU, income is taxed more than capital in the Czech Republic

893. A relatively large percentage of total taxation in the Czech Republic comes from excise duties and income tax (including levies). On the contrary, tax on capital - corporate income tax or self-employment tax - is relatively low, as is property tax (real estate tax, property tax and road tax). Tax on personal income is 3 p.p. above the EU average, while property tax accounts for only 2 % of total tax compared to 7 % in the EU (see Diagram 2.17).

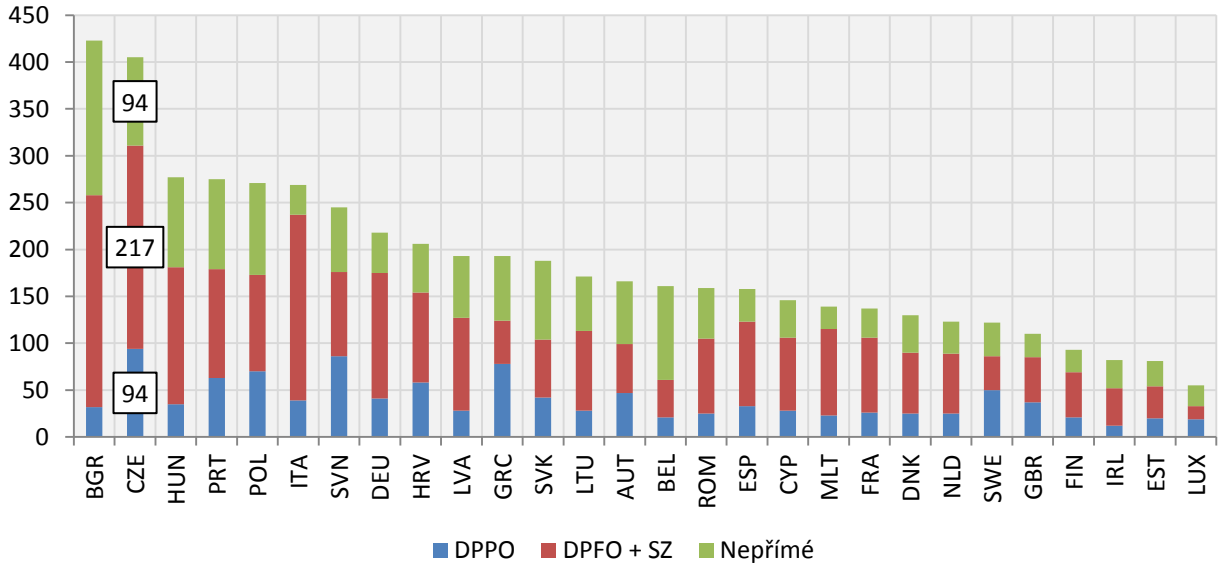
Diagram 2.17 Tax burden distributed by economic function [% share of total taxation]. Source: EUROSTAT. Dataset structure of tax by economic function. *Eurostat* [online]. [gov_a_tax_str].



Amongst EU countries, enterprises in the Czech Republic and Bulgaria take the longest time to process their tax returns

894. The Czech tax collection system is not very user-friendly which is indicated by the time taken in tax administration. In 2015, we ranked 122nd out of 189 countries and we are the penultimate EU member with 405 hours attributed to processing income tax for natural and legal persons and for excise duties. The last ranking state is Bulgaria with 423 hours. The total time taken is the sum of three components - corporate income tax, personal income tax, including levies, and indirect tax such as value added tax or turnover tax. The calculation is for a typical medium-sized business. Administration of personal tax takes 217 hours; this is more than half of the time taken by a typical Czech company to submit its tax return. This is, for example, only one hour less than the total tax return processing time in Germany (see Diagram 2.18).

Diagram 2.18 Time, in hours, required to prepare and submit a tax return for a typical medium-sized business (2016). Source: WB. Doing Business Database. *World Bank* [online].



A growing proportion of public expenditure is financed by ESIF funds

895. The proportion of public administration expenditure financed by ESIF funds is growing. Its scope is subject to an analysis of the MfRD CR (in cooperation with the Ministry of Finance) and will be available by the time the document *CR 2030* has been finalised. Since it is uncertain whether ESIF funds will continue to be available after 2020, this dependence is a potential threat to public services and a deterioration in the functioning of the public administration.

3 Resilient ecosystems

3.1 Landscape and ecosystem services

Landscape is formed by interlinked ecosystems that provide a variety of services

896. The landscape is formed by individual ecosystems and because the landscape as a whole corresponds to the definition of an ecosystem (i.e. it is a system of living and inanimate components within the environment that are interconnected by exchanging substances, energy flow and information transfer, interacting with each other and evolving in a certain space and time), it is also an ecosystem of a higher order - a landscape ecosystem. As such, the landscape provides many different benefits, i.e. ecosystem services.

Ecosystem services include food production and other essential functions

897. Ecosystems in the landscape enable the production of food, fodder and wood. They regulate air quality, local climate, water regime and water quality, erosion and changes in soil properties, disease carrier populations, and waste substance flows. More generally, they support the life cycle of animals and plants, help maintain biodiversity and ensure circulation of nutrients and soil formation. They also create conditions for tourism and recreation, have aesthetic value, are part of the cultural heritage, and help build relationships with places. Landscape ecosystems are important for scientific research and education, and can also have a spiritual and religious dimension.[184]

Contact with nature is necessary for quality of life

898. In recent years, medical research has found that spending time in the countryside, amongst the greenery, improves both mental and physical health.[185] People who have the opportunity to spend time in the countryside or in the city park generally live longer,[186] have better mental well-being,[187] have the capacity to remember more,[188] and co-operate better,[189] and children are less distracted.[190]

A stable landscape is essential for a person's life

899. A landscape ecosystem capable of withstanding destabilising influences is essential for the further development of human society. In particular, a landscape is influenced by farming, forestry and water management practices, by the development of settlements and the technical infrastructure, especially the transportation infrastructure, mining and mass tourism. In recent years, climate change has become increasingly important, influencing the composition, diversity and development of ecosystems and services provided by them.

---

[184] VAČKÁŘ, D.; FRÉLICHOVÁ, J.; LORENCOVÁ, E.; PÁRTL, A.; HARMÁČKOVÁ, Z.; LOUČKOVÁ, B. (2014) *Metodologický rámec integrovaného hodnocení ekosystémových služeb v ČR.*

[185] EEA (2013) *Environment and human health*.

[186] KUO, M. (2015) How might contact with nature promote human health? *Frontiers in Psychology* 6, pp. 1093.

[187] BARTON, J.; PRETTY, J. (2010) What is the best dose of nature and green exercise for improving mental health? *Environmental Science & Technology* 44.

[188] BRATMAN, G. N.; DAILY, G. C.; LEVY, B. J.; GROSS, J. J. (2015) The benefits of experiencing nature. *Landscape and Urban Planning* 138.

[189] ZELENSKI, J. M.; DOPKO, R. L.; CAPALDI, C. A. (2015) Cooperation is in our nature. *Journal of Environmental Psychology* 42.

[190] KUO, M. (2015) How might contact with nature promote human health? *Frontiers in Psychology* 6, pp. 1093.

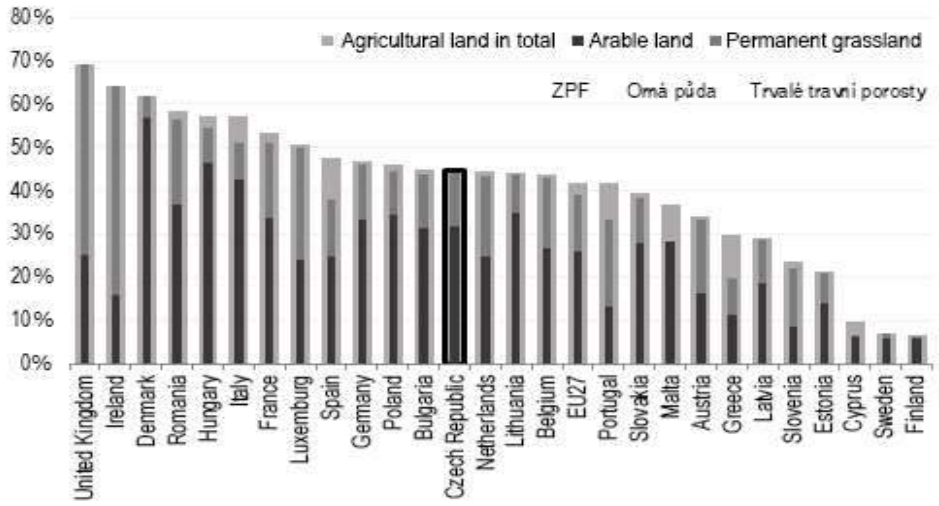
Climate change will lead to more frequent droughts and floods

900. Climate change will affect the ecosystems that are fundamental to carbon storage (forests, permanent grasslands, wetlands and peat bogs), i.e. the vast majority of natural habitats in our country. It will lead to an increased risk of floods, droughts and the rapid spread of non-native species of plants and animals.[191] These phenomena will cause changes in the area that may affect the reflectance of the Earth's surface and further contribute to regional climate change.

The Czech Republic has a high proportion of arable land and forests

901. So far, the form of the Czech landscape has been shaped mainly by agriculture. The proportion of arable land is also high in the Czech Republic compared to the EU27 average (see Diagram 3.1). According to the Land Parcel Identification System, 45 % of the Czech territory was used for agriculture in 2014, out of which arable land accounted for 70 % and permanent grassland for 28 %. However, the area of arable land is gradually declining and the area of permanent grassland, forests and developed areas is increasing. According to the Czech Office for Surveying, Mapping and Cadastre, in 2014 forests accounted for 34 % of our territory.

Diagram 3.1 Total agricultural land (ZPF), arable land and permanent grassland in the total area [%], 2013. Source: CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 96.



The Czech Republic has very little ecologically-managed arable land

902. Between 2000 and 2014, the area of organically farmed land has almost tripled in size, and has almost doubled in the past 10 years - from 255,000 ha to 494,000 ha. In 2014, about 11.7 % of the total area of agricultural land was managed ecologically. However, permanent grasslands (83.6 %) still prevail in the structure of ecologically-managed agricultural land, which include 41.5 % of the total area of permanent grassland in our country. On the other hand, there are almost 57,000 ha of arable land managed ecologically in our country, which represents only 2.3

[191] TEEB (2009) The Economics of Ecosystems and Biodiversity. *TEEB Climate Issues Updat*e. UK NEA (2011) *Synthesis of Key Findings.*

% of the total area of arable land,[192] where the change towards more environment-friendly farming practices could have the greatest effect.

The organic food market is still underdeveloped

903. The average consumption of organic farming products per capita in financial terms in 2014 remained below CZK 200 and the proportion of organic farming products in the total consumption of food and beverages was 0.72 %.[193]

Dependence of Czech farmers on subsidies is higher than average

904. The proportion of direct payments in the net added value of farms is high in our country - 47 % in 2012, compared with the EU average of 31 %. From an economic point of view, this ratio indicates an unhealthy dependence of Czech farmers on subsidies rather than on market conditions.[194] On the other hand, this situation gives a chance to influence, in a certain scale, environmental impacts of agriculture.

The condition of growing at least three crops have no value added in the Czech Republic

905. The reform of the EU's Common Agricultural Policy came into force in 2014. The new rules include the so-called "making 30 % of direct payments greener" aimed at agricultural holdings provided they introduce environmentally friendly practices such as minimal crop diversification, conservation of ecologically important landscape features, as well as maintaining a certain minimum area for permanent grasslands. A farmer farming more than 30 ha of arable land (such farmers cultivate most of the arable land in the Czech Republic) must cultivate at least three crops, plus the main crop must not use more than 75 % of the arable land and the two main crops together must not use more than 95 % of the arable land. However, this condition seems to have no value added in the Czech Republic. At least three crops - wheat, maize and rape - were part of the cropping process for most agricultural enterprises even before the CAP reform in 2014.

Another condition involves Ecological Focus Areas

906. At the same time, everyone who manages at least 15 ha of arable land must manage at least 5 % of this area as the Ecological Focus Area (EFA). In 2016, EFAs included land lying fallow, headlands,[195] areas with fast-growing trees and wooded areas, nitrogen-fixing crops and catch crops and landscape features - stand-alone trees, tree alleys and groups of trees, terraces, balks, grassy thalwegs, ditches and wetlands. For the calculation of the total area managed as the EFA, the actual space allocated to each type of EFA is multiplied by the weighting coefficient according to their ecological significance - ranging from 0.3 (e.g. area with catch crops) to 2.0 (e.g. tree alleys). Measures with a higher ecological significance with the same actual area "weigh more" to meeting the conditions for making the direct payments greener.

[192] CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 102.
[193] IAEI (2016) *Zpráva o trhu s biopotravinami v ČR v roce 2014*.
[194] MA CR (2016) *Strategie resortu MZe ČR s výhledem do roku 2030*.
[195] For the definition of the headland, see the MoE CR. Headland. *eAGRI* [online].

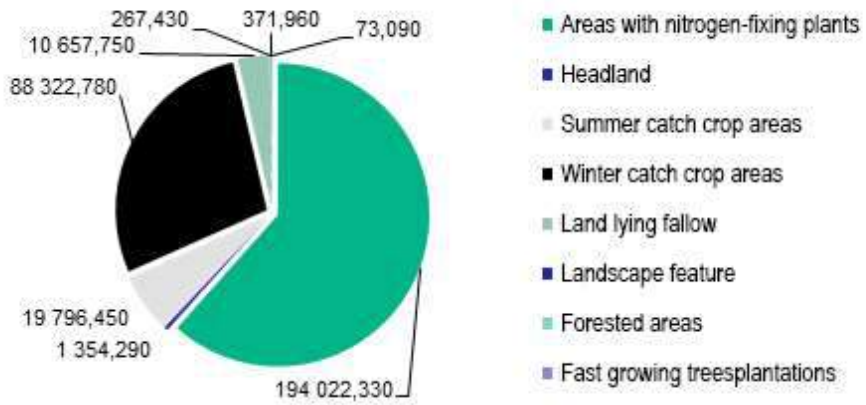
To make direct payments greener, landscape features are used on a negligible scale

907. Czech farmers most frequently declare nitrogen-fixing crops and catch crops as EFAs. The proportion of these areas was 96 % of the total area of EFAs in 2016. Although considered most desirable for the landscape in the context of making direct payments greener, there were only 267 ha of landscape featuresdeclared as EFAs.. This value is extremely negligible in terms of support for biodiversity (see chapter Biodiversity). Also at EU level, the proportion of landscape features in the total area of EFAs is small,[196] although the EU's main reason for defining these areas is to maintain and improve the level of biodiversity.

Chart 3.1 An overview of EFAs declared by Czech farmers in 2016. Source: The State Agricultural Intervention Fund (SZIF), upon personal demand.

	Number of applicants	Total area (ha)	Average area per applicant (ha)
Areas with nitrogen-fixing crops	5 329	194 022,3300	36,4088
Areas with winter catch crops	2 945	88 322,7800	29,9908
Areas with summer catch crops	771	19 796,4500	25,6763
Land lying fallow	1 119	10 657,7500	9,5244
Headlands	343	1 354,2900	3,9484
Forest areas	34	371,9600	10,9400
Landscape feature - balk	177	137,0400	0,7742
Landscape feature - a group of trees	251	75,1100	0,2992
Fast-growing trees plantations	15	73,0900	4,8727
Landscape feature - tree alley	22	31,0900	1,4132
Landscape feature - a grassy thalweg	19	19,0700	1,0037
Landscape feature - a solitary tree	50	1,6600	0,0332
Landscape feature - ditch	2	1,5300	0,7650
Landscape feature - terrace	5	1,0600	0,2120
Landscape feature - wetland	3	0,8700	0,2900

Diagram 3.2 An overview of EFAs declared by Czech farmers in 2016. Source: The State Agricultural Intervention Fund (SZIF), upon personal demand, processed personally.



[196] EC (2016) *Review of greening after one year.*

Plant and animal populations are affected by the fragmentation of the landscape into isolated areas

908. Farming and urbanisation cause the landscape to fragment into isolated areas. The greatest negative influences on landscape connectivity are transportation infrastructures. They cause the most significant division of populations, increase migratory distances and create barriers, thereby reduce food resources and breeding opportunities. The result is a loss of genetic diversity and reduced viability of populations and ecosystems. Last but not least, this fragmentation reduces the landscape's potential for recreation and its permeability to humans.

The Czech landscape is significantly fragmented

909. Between the years 2000-2010, the area of unfragmented landscape dropped from 54,000 km^2 (68.6 % of the total area of the Czech Republic) to 50,000 km^2. In 2010, it covered 63.4 % of the total area of the Czech Republic. Unfragmented landscapes have an area of more than 100 km^2, and are bordered either by roads with more traffic than 1,000 vehicles per 24-hours or by multi-track railways.[197] In the European context, the Czech Republic is among the most fragmented countries, with only Luxembourg, Belgium and the Netherlands considered more fragmented.[198]

The state of long-distance migration corridors is essential for the landscape connectivity

910. Landscape fragmentation as a result of the barrier effect of roads and other artificial structures has led to the design of a network of long-distance migration corridors for big mammals in the Czech Republic, interlinked with other similar networks in neighbouring states. The long-distance migration corridors are tens of kilometres long, 500 metres wide on average and linking areas of interest for big mammals. They also ensure at least a minimum connectivity of the landscape necessary for other forest species.

911. An assessment of the network of long-distance migration corridors identified a total of 29 critical locations, which are currently impassable or passable only with major difficulties. Mostly they are crossings of corridors with motorways, in other cases the corridor goes through a long stretch of open country or densely developed territory.[199]

Historical modifications hinder the improvement of the state of watercourses

912. Migration permeability and natural diversity of watercourses are disrupted in particular by historical transverse structures and technical modifications. The extent of the construction of fish passes and the revitalisation of partial stretches of watercourses has been low and their effect on the overall ecological status is therefore insufficient (see Chapter Water in the Landscape).[200]

913. The intensely cultivated landscape also lacks a continuous and dense network of local roads, which makes it inaccessible to humans.

[197] CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 86.
[198] CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 97.
[199] NCA CR; EVERNIA; RILOG (2010) *Vyhodnocení migrační propustnosti krajiny pro velké savce a návrh ochranných a optimalizačních opatření.*
[200] MoE CR (2016) *Strategie ochrany biologické rozmanitosti České republiky 2016–2025.*

3.2 Biodiversity

914. Diverse biocenoses of wild animals and plants, linked to their natural habitats and able to adapt to changing environmental conditions are a prerequisite for ecosystems to provide ecosystem services.

In the current landscape, there is a shortage of natural features

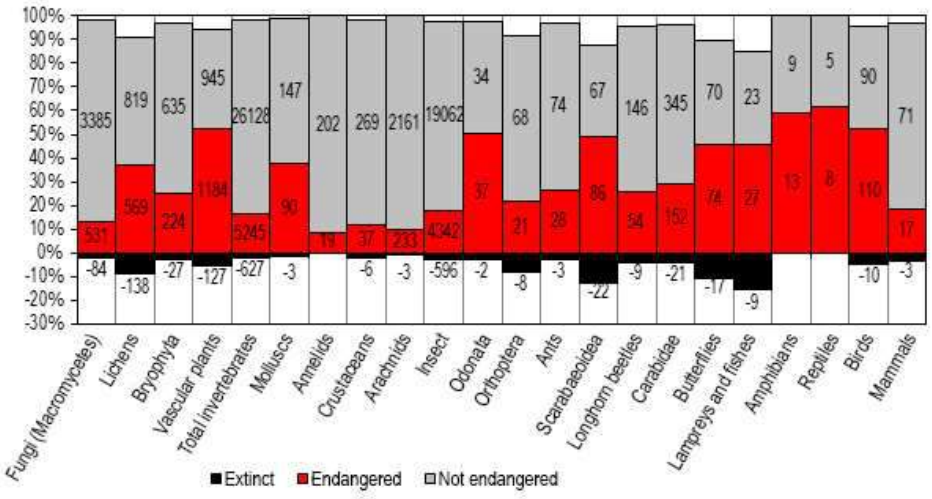
915. In the present intensely exploited and populated landscape, there is a lack of habitats that provide conditions for the permanent existence of diverse species and their typical biocenoses - whether they are small wetlands, floodplains or natural riverbeds of free-flowing rivers and streams, balks, groves, forests (diverse both in species and space), old trees, traditional pastures or native meadows.

With the decline in the diversity of farming methods, the diversity of nature is also reduced

916. In some areas, people stop farming in the landscape, which means there are therefore less and less specific habitats with which certain, usually rare, species of organisms are bound. Meadows and pastures become forested again, old orchards disappear; only the last few places remain in forests where the species associated with the historical forms of forestry survive. Most of the area, on the other hand, is economically intensively exploited, resulting in the disruption of ecosystem functions. These factors endanger not only rare species and biocenoses but also lead to a reduction in the number of individuals of species which were formerly common.[201]

Genetic diversity within species has also considerable economic significance

917. A decrease in the number of individuals and fragmenting populations causes decreased genetic diversity within the species. Genetic diversity is essential for the survival of viable populations of species as well as for the economic activity of humans because it represents a natural reservoir of diverse genotypes for possible use in breeding, and



subsequently in agricultural production, biotechnology, food, cosmetics and the pharmaceutical industry.[202]

[201] NCA CR (2009) *Příroda a krajina České republiky.*
[202] MoE CR (2016) *Strategie ochrany biologické rozmanitosti České republiky 2016–2025.*

Protected areas cover more than one fifth of the Czech territory

918. In order to preserve biodiversity, special protection of areas of interest in terms of natural sciences or aesthetics is essential in order to preserve or improve the condition of the area, to preserve natural functions of the landscape or leave the territory or part of it to develop spontaneously. At present, all national parks, protected landscape areas, national nature reserves, nature protected areas, national natural monuments, nature monuments and Natura 2000 sites is 17,240 km^2, amounting to 22.2 % of the Czech Republic.[203] However, the extent of protection or active intervention in favour of nature is fundamentally different for each type of protected area and its parts (core vs. peripheral zones).

Most natural habitats are not in good condition

919. In the years 2007-2012, only 16 % of the Czech habitat types considered significant for European Community were found to be in a satisfactory condition. In the case of the Czech Republic, a total of 60 habitat types are evaluated, which provides a good overview of the overall status of our natural habitats. The worst conditions were recorded in forests, watercourses, natural and semi-natural grasslands and peat bogs.[204]

A third of species are considered endangered

920. In the Czech Republic, there are about 80,000 known species of plants, fungi and animals. Half of these are fungi, and 90 % of the fungi are microscopic. One third of all species living in the Czech Republic are classified as endangered, according to both European and Czech red lists, with hundreds of species already extinct in our country.[205]

Species linked to watercourses and historical ways of farming and forestry are the most endangered

921. Species of plants and animals linked to watercourses are the most endangered, affected by regulations and the resulting changes in flow dynamics. Another endangered group is a species linked to old and decaying wood, which is minimally present in the Czech forests due to the predominant ways of forestry. Another group at risk of becoming endangered are species linked to a diverse mosaic of landscape features, i.e. butterflies, amphibians and reptiles. Half the species of our vascular plants are endangered (all plants are vascular except algae, lichens and bryophytes). Of the original 161 species of our butterflies, 17 species have disappeared in the Czech Republic and 74 species are endangered. The majority of species of our bees,[206] dragonflies, fishes, amphibians, reptiles and birds are also endangered. Only mammals fare better.[207]

Diagram 3.3 Species status according to the Red Lists of Threatened Species of CR. The numbers represent the number of species in the given category. Source: Nature Conservation Agency of the Czech Republic, data for the year 2010, upon personal request.

[203] The Nature Conservation Agency of CR provided the information upon a personal request.
[204] CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 61-62.
[205] NCA CR (2009) *Příroda a krajina České republiky.*
[206] Čížek, L.; Konvička, M.; Beneš, J.; Fric, Z. (2009) Zpráva o stavu země: Odhmyzeno. Jak se daří nejpočetnější skupině obyvatel České republiky? *Vesmír 88.*
[207] NCA CR (2009) *Příroda a krajina České republiky.*

A decrease in the number of birds reflects changes in agricultural landscape

922. Birds are among the most explored groups of animals (Diagram 3.4). Between 1982 and 2014, populations of common bird species in the Czech Republic decreased by 7.6 %, forest bird species populations by 18.9 % and populations of agricultural landscape bird speciesby 27.5 %. It can be assumed that the number of birds had been decreasing even before monitoring started in 1982. Trends in bird population developments accurately reflect changes in land use, and to a lesser extent, climate change.

Birds decline when farming becomes too intense or when there is no farming at all

923. A temporary positive development occurred after 1989, when the intensity of agriculture decreased for a limited time. As a result, in 1994 and 1995, the number of birds typical for the agricultural landscape increased[208] immediately and reached approximately 130 % of the numbers recorded in 1982. With the economic consolidation of agriculture, there has been a further sharp decline, which continues to this day. After the Czech Republic joined the EU in 2004, further deterioration occurred because of substancial changes in agricultural subsidieswhen the number of farmland birds fell from 99 % of the 1982 level to a final level of 72.5 % in 2014.

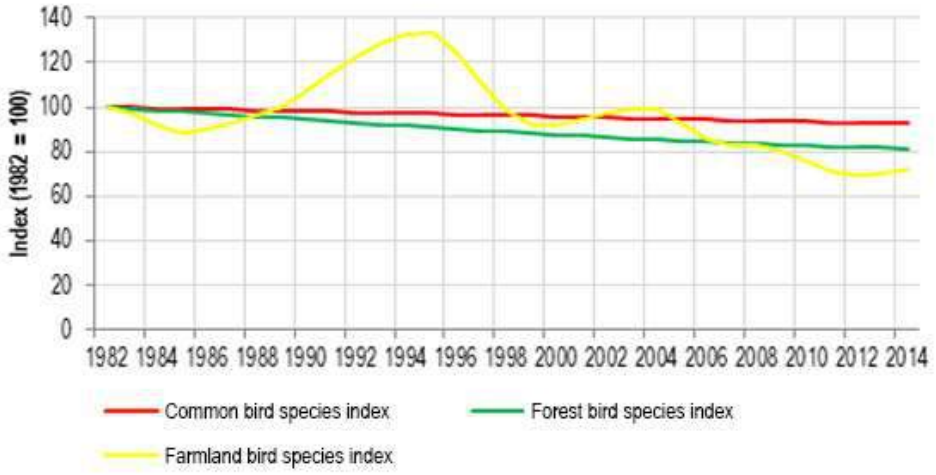
In the forests, rare species become even rarer

924. The number of forest bird species has been decreasing at a fairly stable rate throughout the monitoring period to 81.1 % in 2014. Forest species populations have been decreasing and are being replaced with widespread species that tolerate a considerable range of environmental conditions.[209] This brings unification of the bird communities resulting in the elimination of differences in bird species composition which have originated from different ecosystems. Rare and specialised species are becoming even rarer, and the biodiversity at local and regional levels is decreasing. However, the causes of this development have not yet been studied.

[208] REIF, J.; VOŘÍŠEK, P.; ŠŤASTNÝ, K.; BEJČEK, V.; PETR, J. (2008) Agricultural intensification and farmland birds. *Ibis* 150.

[209] REIF, J.; ŠKORPILOVÁ, J.; VERMOUZEK, Z.; ŠŤASTNÝ, K. (2014) Změny početnosti hnízdních populací běžných druhů ptáků v České republice za období 1982–2013. *Sylvia* 50.

Diagram 3.4 Indicator of common bird species in individual types of environment, CR, 1982–2014. Source: CENIA AND MOE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 64.



Due to climate change, a decline in the number of bird species is expected

925. Climate change is the factor that has been affecting the presence of bird species in the Czech Republic since the mid-1990s. Its influence makes northern species disappear from Central Europe and slightly increases the number of thermophilic species which have so far been mainly predominant in Southern Europe.[210] In connection with this, we can expect to see further decreases in bird species[211] in our country because the area with the largest species diversity will shift north-eastwards.

A better landscape structure must compensate for climate change

926. Climate change will increasingly affect the biodiversity over the coming decades. If not compensated for at least partially by a more appropriate (than current) landscape structure (see Design part), it will result in a total loss of original biodiversity. Climate change can only benefit a limited number of highly adaptable species, ruderal species or species with a tendency to spread rapidly. On the contrary, it can cause harm to rare species demanding very specific environment.[212]

Invasive non-native species pose a serious threat

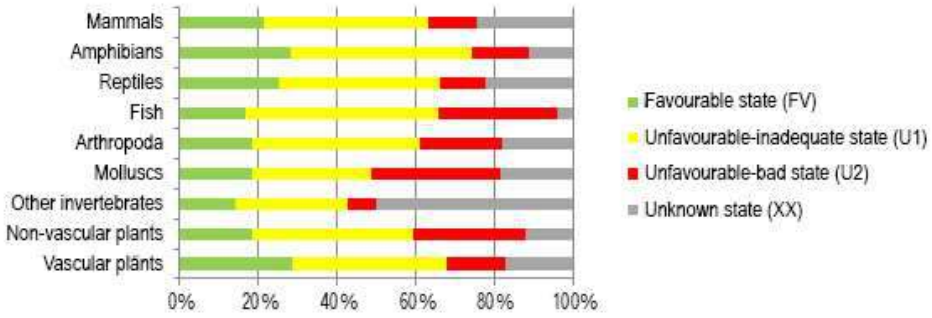
927. Invasive non-native organisms pose a serious threat to native species, biocenoses and ecosystems. The economic damage they inflict is also significant. Some invasive non-native species may also have a negative effect on human health. The Czech Republic is very vulnerable due to its location, dense settlement and a dense network of rivers, roads and railways as the main routes of spreading biological invasions. It can be expected that as a result of the ongoing globalisation and the expected climate change, the severity of this problem will continue to rise.[213]

[210] REIF, J.; VOŘÍŠEK, P.; ŠŤASTNÝ, K.; KOSCHOVÁ, M.; BEJČEK, V. (2008) The impact of climate change on long-term population trends of birds in a central European country. *Animal Conservation* 11.
[211] HUNTLEY, B.; GREEN, R. E.; COLLINGHAM, Y. C.; WILLIS, S. G. (2007) *Climatic Atlas of European Breeding Birds.*
[212] MoE CR (2015) *Strategie přizpůsobení se změně klimatu v podmínkách ČR.*
[213] MoE CR (2016) *Strategie ochrany biologické rozmanitosti České republiky 2016–2025.*

We are witnessing a decline in biodiversity all over Europe

928. In the EU25 as a whole, only 23 % of animal and plant species of Community interest and 16 % of habitats of Community interest were assessed to be in a favourable state during the years 2007-2012 (Diagram 3.5). In the Czech Republic, it was 25 % of species of animals and plants of Community interest and 16 % of habitats of Community interest in the same period. Between 1990 and 2012, the population of common bird species declined by 12 % in Europe, the forest bird population decreased by 8 % and the farmland bird population by 30 % (Diagram 3.6). Between 1990 and 2011, there was also a significant decline in the numbers of grassland butterflies as a result of a significant decline in grassland diversity (Diagram 3.7).

Diagram 3.5 Status of species of Community interest by taxonomic groups in the EU25 [%], 2007-2012. Source: CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 66.



Note: non-vascular plants = lichens and bryophytes

Diagram 3.6 The evolution of the indicator of bird species in agricultural landscape, the indicator of forest bird species and the overall indicator of common bird species in Europe, 1990–2012. Source: CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 67.

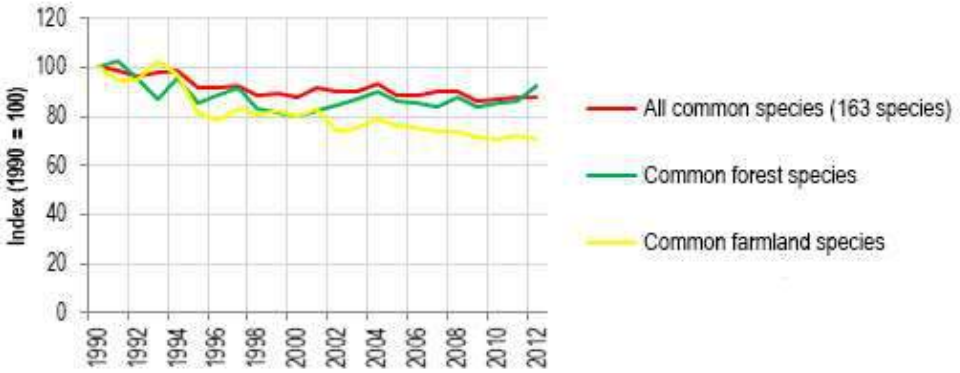
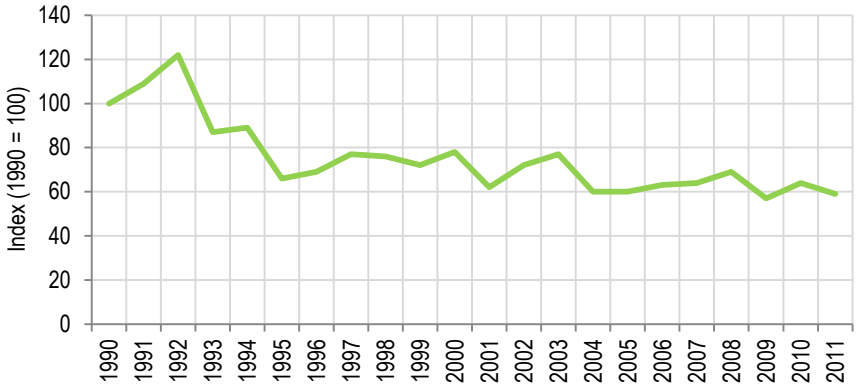


Diagram 3.7 The evolution of the indicator of grassland butterflies in Europe, 1990–2011. Source: CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 67.

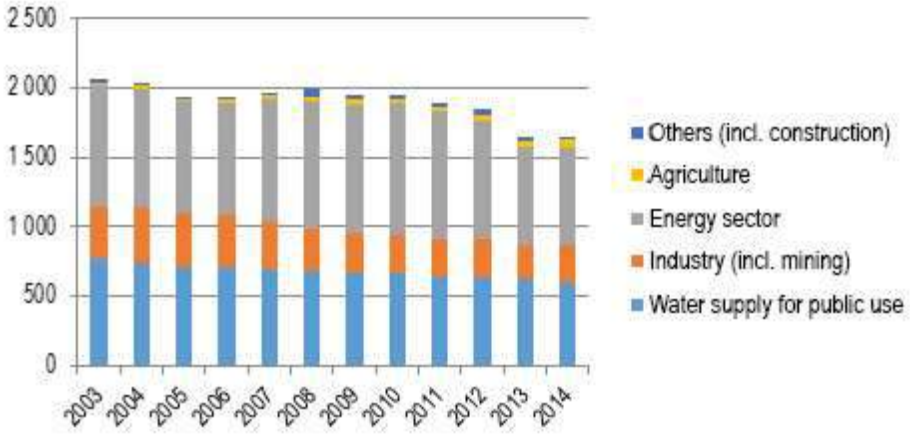


3.3 Water in the landscape

Water is vital for the functioning of ecosystems and economic sectors

929. Water is an essential component of all organisms and ecosystems and a condition for their existence. The security of a quality water supply is essential to the quality of human life. Water is an irreplaceable feedstock for economic sectors from energy and industry to agriculture and the food industry (see Chapter Economic Model and Graph 3.8).

Graph 3.8 Surface and groundwater consumption by individual sectors in the Czech Republic [mil. M^3], 2003-2014. Source: MoE, data provided upon personal request, processed personally.



Note: However, actual water consumption in agriculture is, of course, much higher, since it is mostly covered by direct rainfall and not by the subsequent consumption of surface and groundwater (i.e. irrigation).

Many of our surface waters and groundwaters are in a poor condition

930. Only 21 % of the surface water bodies were last evaluated as at least good or even of a better ecological status or more specifically of ecological potential (for heavily modified and artificial surface water) respectively. Fifty-seven percent of surface water bodies achieved good chemical status. In the assessment of groundwater bodies, a good

chemical status of 27 % and a good quantification of 69 % were recorded.[214]

Drainage is accelerated by water flow regulation and land drainage

931. The ability of our landscape to retain water has been significantly weakened in the past, in particular by regulations of large-scale watercourses and drainage of farmland or cultivated forests, leading to an accelerated drainage of water into the lower parts of the catchment areas where most settlements are located. Roughly a quarter of agricultural land in the Czech Republic is drained using systematic drainage. Approximately 30-40 % of these drainage systems is currently damaged and urgently requires a decision on its future use[215] (see Design section).

932. Ongoing destabilisation of the water regime in the landscape is also associated with an increase in the extent of paved areas and inappropriate tracking and drainage of roads, including forest roads.

The size of arable land blocks, inappropriate choice of crops and ways of ploughing have negative effect on floods

933. Throughout the agricultural landscape, the water regime is negatively affected by the lack of natural barriers against accelerated water drainage - balks, groves, infiltration belts and so on. The average size of an agricultural lot in 1948 was less than 0.25 ha - today it is 20 ha.[216] Despite its hilly relief, the Czech Republic has the largest average land area in Europe.[217] Damage caused by floods is exacerbated by an inappropriate choice of crops and improper ploughing practices on slopes.

There is a lack of water in the landscape and excessive evaporation occurs

934. The landscape has insufficient numbers of small wetlands, small reservoirs and permanent vegetation areas which would facilitate water retention. Common farming methods are still frequently used, which make the moisture evaporate excessively from the soil. Clear-felling system, which removes all the trees, also creates open areas in the forests, where the snow melts faster and the precipitation water evaporates rapidly.

Phosphorous and nitrogen pollution has not yet been solved

935. Although in general, the pollution of discharged waste water has been greatly reduced over the past 20 years, the problem with phosphorus still remains.[218] That also includes pollution with phosphorus and nitrogen from agricultural activities, both from intensive livestock husbandry, and especially by leaching of phosphorous and nitrogenous fertilisers from soil to rivers and water reservoirs. In them, the surplus of nutrients causes an excessive development of the so-called water bloom formed by the cyanobacteria and algae, thus deteriorating the conditions for aquatic organisms as well as for recreational and other uses of water.

936. Damage to aquatic ecosystems due to pesticide residues and pharmaceuticals is a relatively new problem, as well as the potential impact

[214] CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 49.
[215] MA CR (2015) *Situační a výhledová zpráva Půda 2015.*
[216] PODHRÁZSKÁ, J.; KARÁSEK, P. (2014) *Systém analýzy území a návrhu opatření k ochraně půdy a vody v krajině*.
[217] MA CR (2015) *Situační a výhledová zpráva Půda 2015.*
[218] FIALA, D.; FUČÍK, P.; HRUŠKA, J.; ROSENDORF, P.; SIMON, O. (2013) Fosfor v centru pozornosti. In *Vodní hospodářství* 63(8)

on human health of mixtures of various chemicals, including endocrine disruptors, in drinking water. (See Chapter People and Society)

The priority will be to ensure water availability and quality

937. Water availability and its quality are among the major challenges we will face in the coming decades. Due to its geographical location, the Czech Republic is the country where most of the water flows out through watercourses and only a negligible amount of water flows in through them. Almost all the water in our country comes from precipitation which has fallen in our territory. The water regime in the Czech landscape is therefore essential for maintaining the stability of ecosystems and of ecosystem services provided by them and for mitigating the consequences of hydrological extremes related to climate change.

Climate change will bring more drought and water erosion

938. The expected impact of climate change includes an increase in the average air temperature of approximately 2.7 °C in summer and 1.8 °C in winter[219] for the period 2040–2069, and the associated increase in water evaporation. However, the total quantity of water evaporating from river basins is limited by the amount of water available. As soon as there is no supply of water in the soil, evaporation and air cooling will be supressed. Such developments increase the likelihood of heatwaves, droughts and forest fires. Air of a higher temperature can also hold more water which can lead to more intense torrential rainfall. These are directly related to erosion processes and leaching of soil particles, along with fertiliser residues, into watercourses and reservoirs (see Chapter Soil care).[220]

Due to lower soil moisture, wind erosion will also increase

939. The negative impact of climate change will also be reflected in the significant expansion of soil vulnerable to wind erosion since the air temperature affects evaporation and hence soil moisture. In general, the lower the soil moisture, the higher its vulnerability to wind erosion.

Less snow will bring less water for plants at the start of the spring growing season

940. During this century, higher water evaporation due to rising air temperatures will be partly compensated by a moderate increase in the total annual precipitation in most of our territory. This will take place mainly in the winter, while in the summer we might expect a possible decrease in rainfall. Higher air temperatures in the winter period will help change the nature of precipitation from snow to rain, and also bring less water from the snow cover from early spring. The spring melting time will shift towards the winter season.[221]

Lower precipitation will lead to poorer surface water quality and lower groundwater yields

941. Such climate developments will lead to a decrease in groundwater levels and a decrease in flow rates, especially in dry periods during summer and autumn. Small flow rates and lower flow speed will result in longer water retention in rivers and reservoirs, so the water will become more heated, improving the conditions for the growth of cyanobacteria and algae, reducing the dissolved oxygen content and worsening the conditions for aquatic animals. Reduced flow rates also mean a smaller volume of

[219] PRETEL, J. ET AL. (2011) *Zpřesnění dosavadních odhadů dopadů klimatické změny v sektorech vodního hospodářství, zemědělství a lesnictví a návrhy adaptačních opatření.*
[220] MoE CR (2015) *Strategie přizpůsobení se změně klimatu v podmínkách ČR.*
[221] Ibidem.

water to dilute contamination, and hence its higher concentration. The decreased dilution capacity of watercourses will particularly adversely affect phosphorus concentrations. In the following period, the ecological status of surface water is likely to deteriorate due to poor water quality during low flow periods.[222]

3.4 Soil care

Soil is a key component of ecosystems

942. Soil has a decisive impact on the stability of ecosystems and on the production of biomass. It is formed by rock weathering and activities of organisms. This process is so slow that we can regard soil as a non-renewable resource.

It is indispensable for agriculture, holds large amounts of water and carries a lot of carbon

943. Soil is a basic resource for agriculture and forestry. As such, it has a fundamental security aspect. In addition, soil is the environment where water and nutrients circulate and where heat exchange between the earth and the air takes place; it is the environment for soil organisms, it keeps the seed bank, has the ability to filter and retain precipitation, and to bind pollutants. If soil has a favourable structure and chemical composition, it can significantly increase the stability of ecosystems, and last but not least, soil can capture and store a large amount of carbon in the long term, the release of which would contribute to more intense climate change.

Half of our soils are at risk of induration

944. The Czech Republic is one of the countries with the most compacted agricultural land in Europe.[223] According to available data, about half of agricultural land in the Czech Republic is at risk of compaction.[224] The compation is caused by heavy machinery movements under unsuitable conditions, i.e. wet conditions, the cultivation of monocultures with little or no presence of perennial forage crops (e.g. clover and lucerne) in the crop rotation, and, as a result of total soil degradation, particularly acidification and the loss of the organic component of soil (see below).

Soil compaction increases water erosion

945. In addition to the overall deterioration in soil fertility, the soil compaction also reduces its filtration capability, so that during rain, precipitation runs down the surface and during periods of drought, on the contrary, the water in the soil is missing. Because of this, the Czech Republic has been losing agricultural land at a rapid pace. Soil compaction increases water erosion during which soil particles are discharged by the flow of rainwater on uncovered soil surface on slopes.

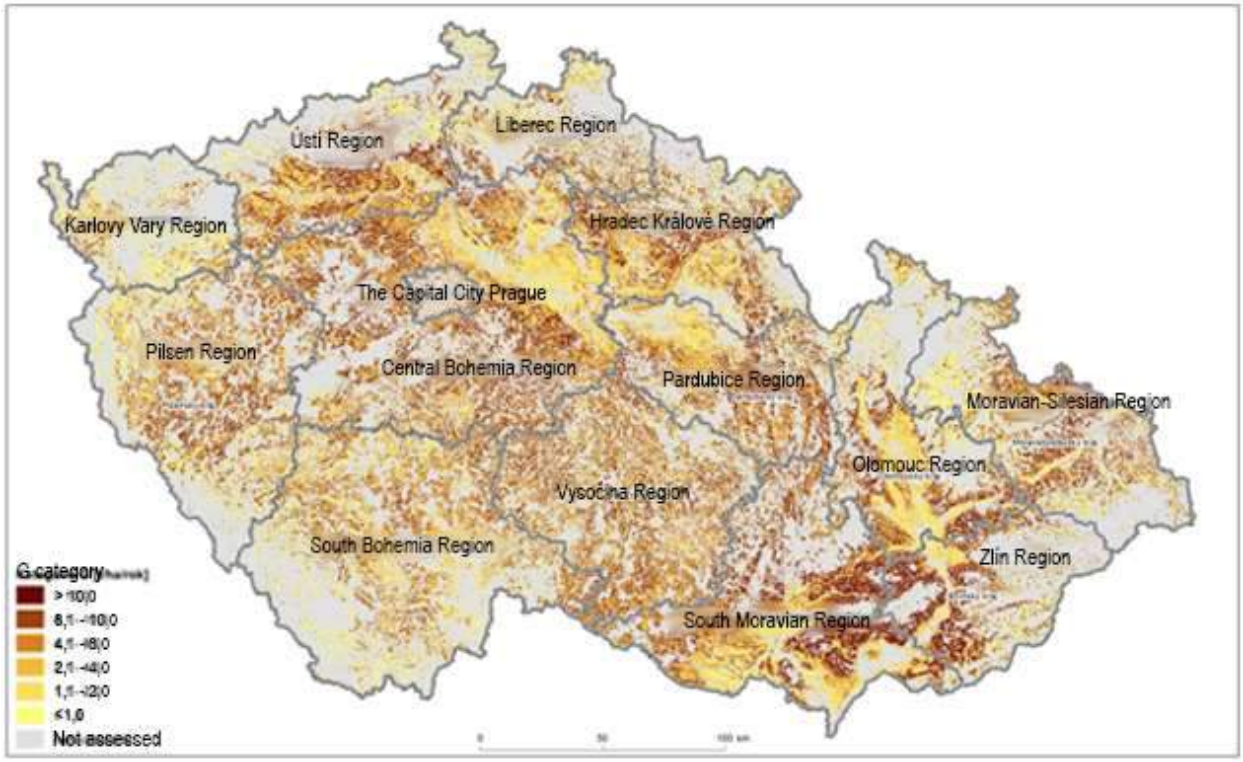
Our most fertile soil is threatened by wind erosion

946. In some parts of our country, there is also a loss of soil as a result of wind erosion, often impacting the most fertile soils in the Polabí region and South Moravia. Although in the European context, the Czech Republic is not one of the most endangered countries, our territory also has a number of areas endangered severely by erosion.

---

[222] Ibidem.
[223] STOLTE, J.; TESFAI, M.; ØYGARDEN, L.; KVÆRNØ, S.; KEIZER, J.; VERHEIJEN, F.; PANAGOS, P.; BALLABIO, C.; HESSEL, R. (eds.) (2016) *Soil threats in Europe.*
[224] MA (2015) *Situační a výhledová zpráva Půda 2015.*

Figure 3.1 Potential vulnerability of agricultural land to water erosion (G), expressed by long-term average soil loss. Source: CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 89.



More than half of the soils are vulnerable to water erosion

947. A major acceleration of erosion occurred after a massive consolidation of plots of land with subsequent cultivation of monocultures, irrespective of land slopes (even in the case of crops such as corn, sugar beet or potatoes which give little protection to the soil from erosion). More than half of our agricultural land is now vulnerable to water erosion and 14 % to wind erosion.[225] Total annual erosion losses range between 4-10 billion CZK.[226] Due to climate change, it is estimated that the damage caused by erosion in 2030 will be double compared to the current condition, unless the structure of the Czech landscape and the methods of its management have improved.[227]

948. Clear-felling system and inappropriate ways of using heavy machinery to harvest and transport wood are major contributory factors to the erosion of forest soils.

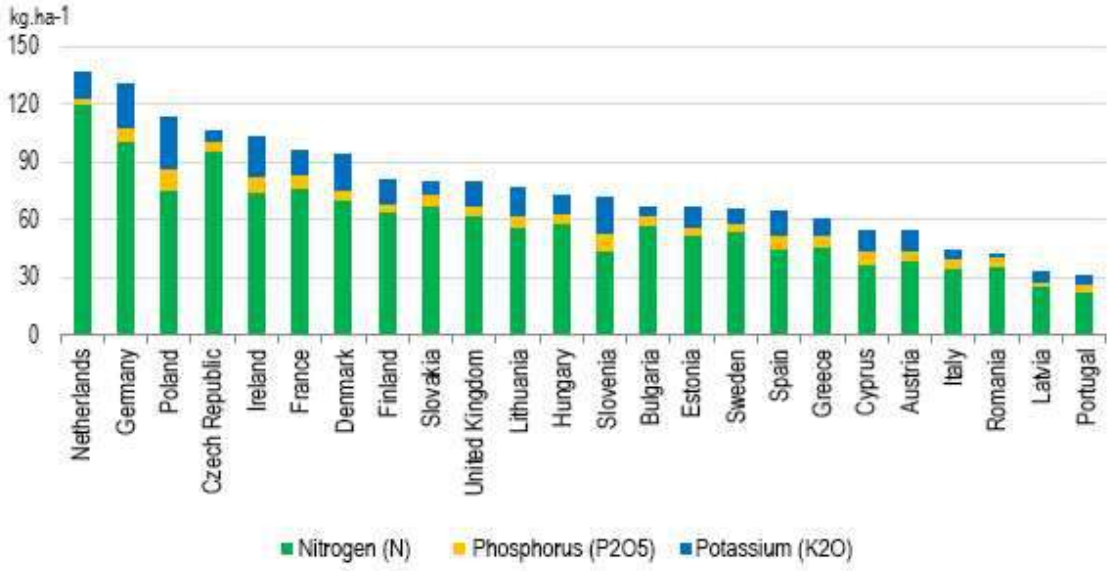
The intensity of Czech agriculture is high compared to other EU countries

949. The Czech Republic has a high proportion of arable land when compared to the total area of the territory (see chapter Landscape and ecosystem services) and above-average consumption of mineral fertilisers compared to the EU average (Diagram 3.9), i.e. high agricultural intensity and correspondingly significant negative impacts on the quality of the

[225] VOPRAVIL, J.; KHEL, T.; HLADÍK, J.; HERIAN, J.; HAVELKOVÁ, L. (2016) *Metodika půdního průzkumu zemědělských pozemků určená pro pachtovní smlouvy.*
[226] MA CR (2016) *Strategie resortu Ministerstva zemědělství ČR s výhledem do roku 2030.*
[227] RSWC; CHMI (2016) *Vliv očekávaných klimatických změn na půdy České republiky a hodnocení jejich produkční funkce.*

environment. The proportion of organic matter is constantly decreasing in the intensively cultivated land, especially if a substantial part of the biomass is exported and only a minimum proportion of organic matter is retained in the soil. In addition, water and wind erosion (see above) contributes to a reduction of the organic matter content in soil; substances bound to soil particles are directly swept away. Increasing average temperatures as a result of advancing climate change will also result in an acceleration of soil organic matter mineralisation, which, without appropriate compensatory measures, can lead to further significant decline of its share (see Design part).

Diagram 3.9 Consumption of mineral fertilisers (N, P2O5, K2O) [kg.ha^{-1} of farmed agricultural land], 2013. Source: MoE CR provided the information upon a personal request.



Over 40 % of our soils are at risk of acidification

950. According to current data, 43 % of agricultural land in the Czech Republic is significantly affected by acidification. Soils are highly susceptible to acidification mainly in the Vysočina Region, as well as in the regions of South Bohemia and Karlovy Vary.[228] Higher soil acidity leads to destruction of the soil structure and increases the soil's vulnerability to erosion. Other effects of acidification include deterioration of soil humus quality, slow release of mineral nitrogen from humus and binding phosphorus to compounds that make it difficult for plants to access it.

Older forest stands are in poor health

951. Damage to forest stands is still very high in the Czech Republic, measured according to the relative loss of foliage in the tree crown compared to a healthy tree growing under the same conditions. Evaluated in 2014, in forest stands aged 60 years or more, 73 % of conifers and 40 % of deciduous trees lost more than a quarter of their foliage. In stands younger than 60 years, the situation is more favourable: 25 % of conifers and 17 % of deciduous trees. At the end of the 1990s, there was some

[228] MA CR (2015) *Situační a výhledová zpráva Půda 2015.*

improvement, but after 2000, the trend rather worsened and the concern for the health of forest stands continues.[229]

Cultivation of spruce monocultures aggravates the chemical composition of soils

952. Poor health status of older forest stands has been caused by the extreme air pollution over recent decades. Older stands were thus largely affected by poor air quality from the early stage of growth. Through countrywide desulphurisation of large sources of pollution from the mid-1990s, there has been a reduction in the amount of pollutants in the air, but forest stands are slow to react to such changes. It is because the chemical composition of forest soils is disturbed by acid rain, with further cultivation of spruce monocultures intensifying the acidification.[230] In addition, the emissions continue, although the intensity has declined.

The condition of Czech forests is considered one of the worst in Europe

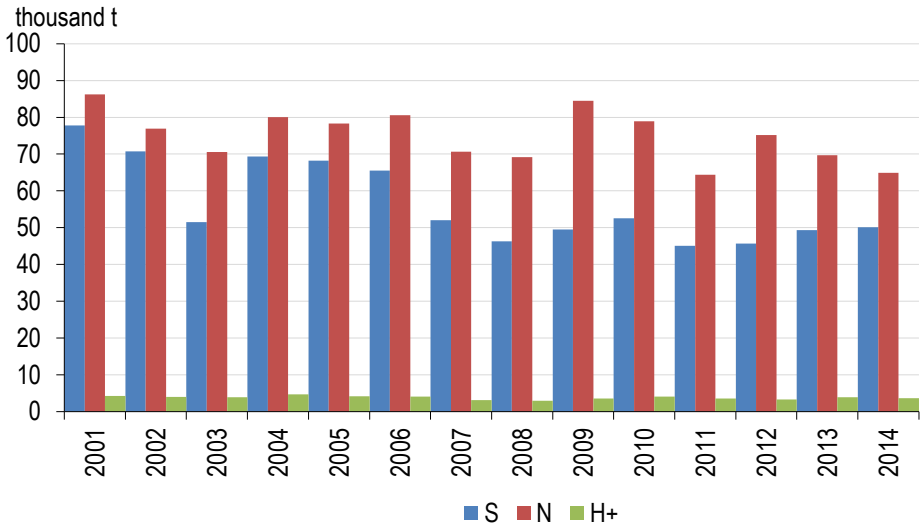
953. Determined by the level of defoliation, the forests with the most significant damage across Europe are found mainly in southern and southeastern France, northern Italy, the Czech Republic, Slovakia and central Germany.[231] In the European context, the condition of Czech forests remains poor, despite the significant decrease in pollutant emissions into the atmosphere during the 1990s.

Forest soils are overfertilised with nitrogen from polluted air

954. The viability of forest soils and stands can also be assessed by the ratio of carbon and nitrogen concentrations in the soil. If this index is less than 1, the nutrient cycle is disturbed and the health of the forest can be at risk. In the Czech Republic, most of the forest soils show N/C index only slightly above 1, which is the lowest and therefore the worst value compared to other Central European countries. The underlying cause of poor soil viability is the storage of nitrogen and other pollutants from the atmosphere to an extent which exceeds their consumption and the storage capacity of forest soils in the long-term perspective.[232] And it is also true that the ecosystems of deciduous stands are better able to handle excess nitrogen than coniferous stands ecosystems.[233]

[229] CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 68.
[230] HRUŠKA, J., CIENCIALA, E. (eds.) (2001) *Dlouhodobá acidifikace a nutriční degradace lesních půd – limitující faktor současného lesnictví*.
[231] CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 80.
[232] Ibidem.
[233] HRUŠKA, J., CIENCIALA, E. (eds.) (2001) *Dlouhodobá acidifikace a nutriční degradace lesních půd – limitující faktor současného lesnictví*.

Diagram 3.10 Development of total atmospheric deposition of sulphur, nitrogen and hydrogen ions in the Czech Republic [thousands of t], 2001–2014. Source: CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 29.



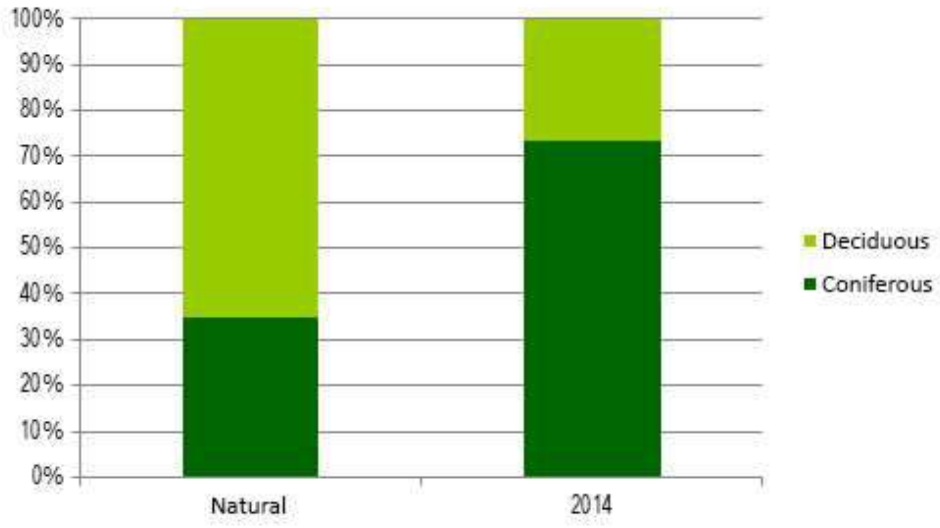
Note: The deposition of hydrogen ions is directly proportional to the acidity of precipitation.

Our forests are mainly coniferous; spruce is still the most commonly planted tree

955. The proportion of deciduous trees in the total area of forests is 41.1 %,[234] which is close to the target species composition determined by regional forest development plans. On the contrary, according to the reconstruction of the natural condition of forest vegetation, the area of the Czech Republic should be dominated by deciduous stands with 65.3 %.[235] The Czech forests are nowadays mainly made up of homogeneous stands with a predominance of conifers, which are particularly prone to pest damage and weather fluctuations. A total of 44.1 % of the forest stands is still made up of spruce, and[236] it is still the most frequently planted tree. Its proportion of total plantings is higher than the proportion of all deciduous trees put together.[237]

[234] FMI (2008) *Výstupy národní inventarizace lesů uskutečněné v letech 2011–2015*.
[235] CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 73, Diagram 1.
[236] FMI (2008) *Výstupy národní inventarizace lesů uskutečněné v letech 2011–2015*.
[237] MA CR (2015) *Zpráva o stavu lesa a lesního hospodářství ČR v roce 2014.*

Diagram 3.11 Reconstructed natural and current composition of Czech forests [%], 2014. Source: CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014,* pp. 73, personal processing.



4 Municipalities and regions

The settlement structure of the Czech Republic has stabilised

956. The settlement structure of the Czech territory has not changed since the modern period. In the European context, the settlement composition of the Czech Republic is monocentric due to the exclusive position of Prague. From a national point of view, the Czech Republic is a balanced system of regional centres consisting of a relatively small number of large cities and many small municipalities servicing virtually the whole territory. The degree of urbanisation is comparable to Germany. A relatively large proportion of people live in small or medium-sized towns and the borderlands limit the cross-border significance of most of our centres apart from Ostrava and Liberec.

Chart 4.1 Numbers of municipalities and population in the Czech Republic. Source: CZSO (2015) *Malý lexikon obcí České republiky 2015*, data from sets Velikostní skupiny obcí podle krajů, okresů - počet obcí and Velikostní skupiny obcí podle krajů, okresů - počet obyvatel v %; personal processing.

Municipality size by population	Number of municipalities	Population (in %)
1–199	1 448	1.7
200–499	2 006	6.2
500–999	1 365	9.1
1 000–1 999	747	9.9
2 000–4 999	415	11.9
5 000–9 999	141	9.2
10 000–19 999	69	9.2
20 000–49 999	43	12.1
50 000–99 999	14	9.7
above 100,000	5	20.9
Total	6 253	100.0

In the Czech Republic, we distinguish three types of territory

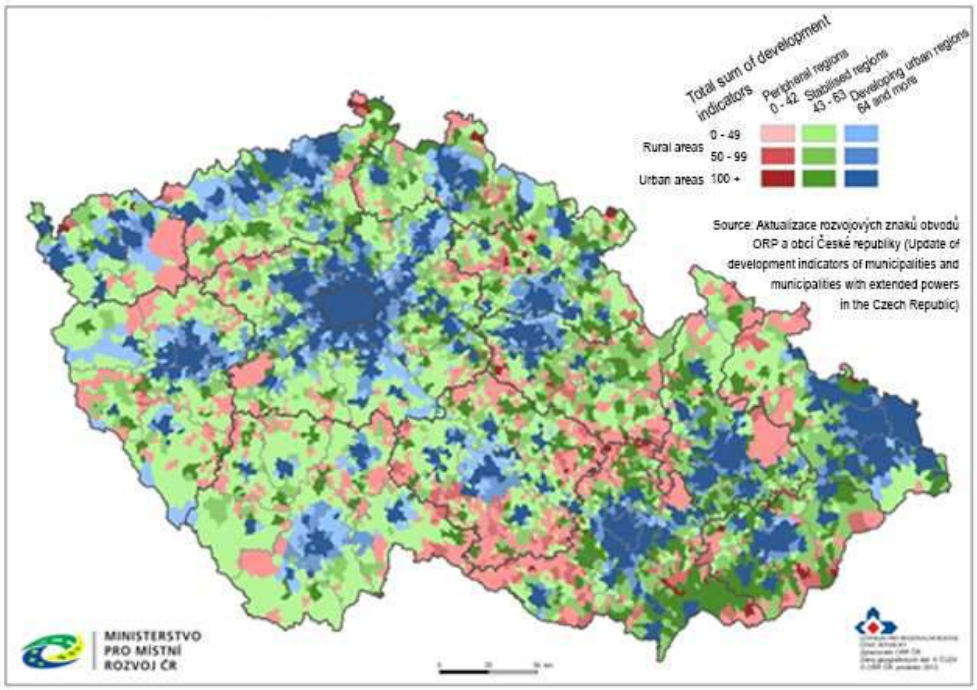
957. Rural areas represent 79 % of the state's area, which is home to 30 % of the population.[238] But with the division into cities and the countryside this is insufficient. Three types of territory can be distinguished in the Czech Republic.[239] The first is a growing and prosperous metropolitan area with dominant Prague. Stabilised areas of micro-regional centres of limited significance are located east and south of Prague. Particularly in the borderlands or along the borders of the regions, there are fragmented outer and inner peripheries where many elderly citizens and few children live. Highly qualified jobs, public services and the infrastructure are missing here due to lower levels of education, and few new flats are being constructed. The isolation of the border regions in the second half of the 20th century mainly caused them to become peripheral and suffer from poor

[238] Rural area refers to all municipalities with a population of up to 2,000 inhabitants and municipalities with a population of up to 3,000 inhabitants with a population density of less than 150 inhabitants/km^2. More details available in CZSO (2009) *Tisková zpráva Postavení venkova v krajích ČR*.

[239] MRD CR (2013) *Strategie regionálního rozvoje ČR 2014-2020*.

accessibility, low population density and lower than average education. The same applies to internal peripheries located along the edges of metropolitan regions and on the outskirts of regional centres.[240]

Figure 4.1 Czech Republic territory typology. Source: MRD CR (2014) *Strategy of Regional Development in CR 2014–2020*, pp. 57.



Cities stabilise the settlement structure

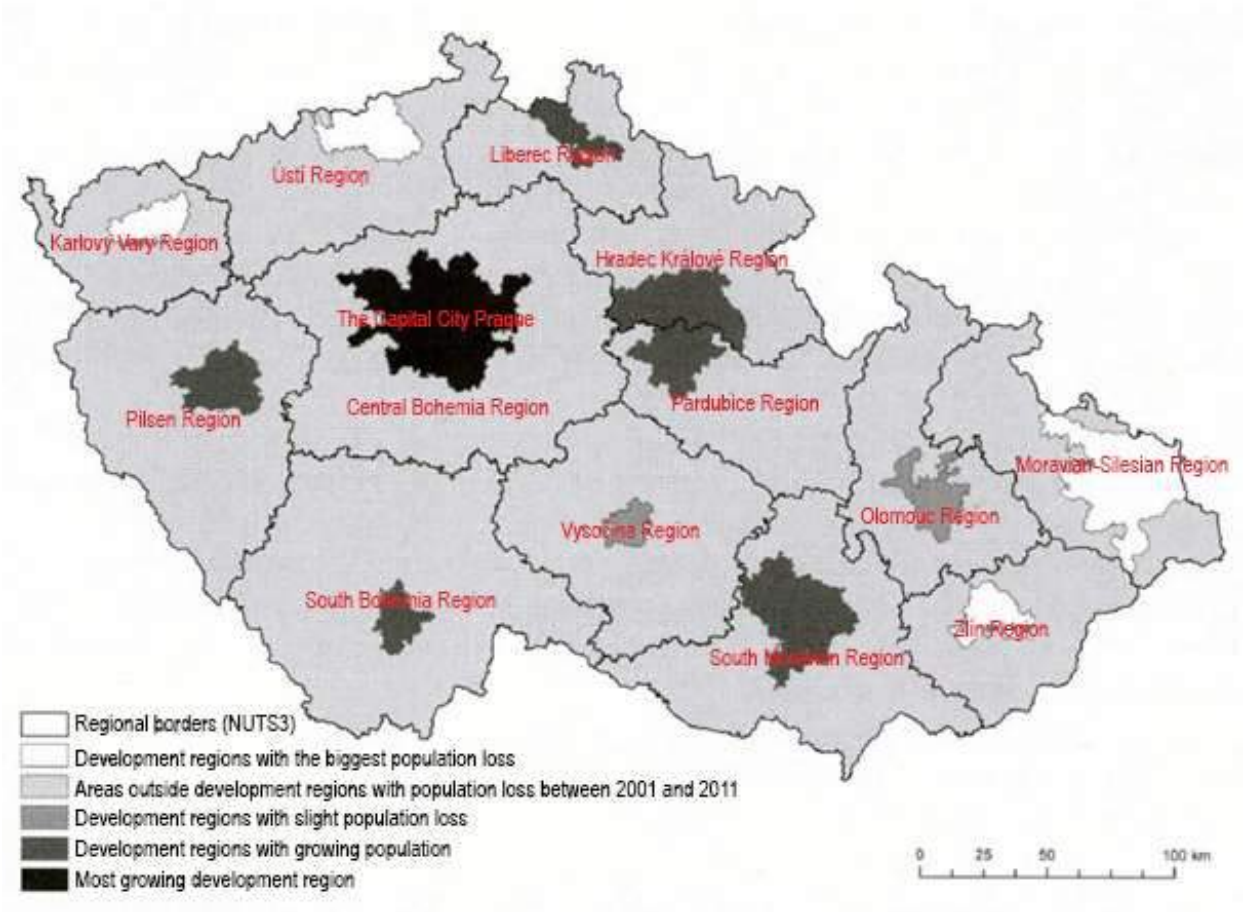
958. Cities are the basic building blocks of prosperity. The majority of the population live here; over 60 % of the population live in municipalities with more than 5,000 inhabitants. Medium and small towns stabilise settlement structures, and people around them successfully find jobs and services. However, small villages also form a rural landscape because they play a role not only in agriculture, forestry and water management, but also in maintaining the cultural landscape.

Young people frequently leave peripheral territories

959. Due to the lack of jobs, younger and more educated people have been leaving peripheral territories at the beginning of their professional careers and later they are leaving the regions which are affected by industrial restructuralisation. They move to the emerging metropolitan areas, especially to Prague, and to a lesser extent to Brno, Pilsen and other centres for "a better life".[241]

[240] MUSIL, J.; MÜLLER, J. (2006) *Vnitřní periferie České republiky, sociální soudržnost a sociální vyloučení.*
[241] MAIER K. (1998) Účinnost dosavadních a budoucích nástrojů pro snižování regionálních rozdílů v České republice. In *Urbanismus a územní rozvoj* 1(6). Compare to MAIER, K.; FRANKE, D. (2015) Trendy prostorové sociálně-ekonomické polarizace v Česku 2001–2011. *Sociologický časopis* 51(1), pp. 103.

Figure 4.2 Development of Czech population proportions in the years 2001 to 2011. Source: MAIER, K.; FRANKE, D. (2015) Trendy prostorové sociálně-ekonomické polarizace v Česku 2001–2011, *Sociologický časopis* 51(1), pp. 103.



Internal migration weakens public services

960. The age and social structure of the population in the affected parts of the country is changing considerably. The availability of public services is also deteriorating. In small municipalities, in particular, the standard of health care and public transport services is inadequate, leisure activities for children and young people are less accessible as is the drinking water supply and sewerage.[242] At the level of municipalities with extended competence (MEC), the number of social workers is dwindling, while the social phenomena needing to be dealt with are increasing.[243] Existing buildings and infrastructure remain unused and dilapidated. On the contrary, in more attractive locations, new developments irreversibly

[242] MoI CR (2004) *Strategie podpory dostupnosti a kvality veřejných služeb*.
[243] MLSA CR (2013) *Národní strategie rozvoje sociálních služeb pro období 2014–2020,* pp. 22, 27. For social services planning, the region is the determining subject, because it is responsible for the availability of social services and forms the so-called social service network in the region. Cooperation in the planning of social services within the MEC takes place on a voluntary basis, but at varying levels. While some municipalities profit more from social services planning, other municipalities manage to have spread some social services in order to provide them more widely in individual municipalities in the MEC administrative district.

replace large areas of agricultural land[244] - a decrease of several hectares per week - and the demand for new public infrastructure is growing rapidly.

4.1 Suburbanisation and increasing spatial mobility

Dynamics of suburbanisation

961. Over the past centuries and decades, people have moved from the countryside to cities. In the last quarter of the century, we have seen the growth of suburban settlements, sometimes at the expense of core cities. The suburbanisation trend strengthened in the years of economic boom. The population in the countryside rose by a tenth between 2001 and 2014, while in cities - except for Prague and Central Bohemia - it generally stagnated.[245] The impact of the economic crisis (2008) has gradually reduced migration to the countryside. In any case, we can regard it as a long-term trend.

Sources of suburbanisation

962. This is not, however, a generous return to the countryside.[246] Migration is highly selective. In the years 2010-2014, a third of the rural communities have lost population; in the Karlovy Vary Region and in the border area with Poland it was almost 45 %. On the contrary, only each sixth municipality close to the regional cities lost population in the same five-year period. In general, rural villages with good accessibility and sufficient workplaces in and around the area are more attractive for migration. The regional cities themselves grew at a much slower pace than the nearby smaller cities (most of them Prague, Liberec and Pilsen), or they even decreased in population.[247]

Signs of suburbanisation

963. Suburbanisation is manifested by appropriation of a land that was previously free, worsening the permeability of the landscape for humans, fauna and flora, as well as having a detrimental effect on the stability of ecosystems (see Key Area Resilient ecosystems). Due to the scattered nature of new developments, the cost of public infrastructure is rising dramatically and the availability of public services and amenities is deteriorating (See Key People and society).

[244] According to the Ministry of Environment, the trend of arable land appropriation is persistent. According to the Ministry of Environment, the trend of arable land appropriation is persistent. Between 1992 and 2000, 3,144 hectares of agricultural land were appropriated, with 55,487 ha (1.3 %) in 2000-2012. In 2013, another 2,400 ha were appropriated, and then 2,441 ha in 2014. The proportion of developed and other areas increased by 3.3 % (26,400 ha) between 2000-2012 on 10.6 % of the territory of the Czech Republic; this proportion has not increased further in 2013 and 2014. However, the developed areas and courtyards account for only 1.6 % of the area of the Czech Republic, while the other areas account for the remaining 9 %. CENIA; MoE CR (2015) *Zpráva o životním prostředí České republiky 2014*, pp. 6, 84-85.

[245] OG CR (2016) *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky*, pp. 117–118.

[246] Rural villages are designated as those with less than 2,000 inhabitants by the 31 December 2014, and also municipalities with 2,000 to 3,000 inhabitants that did not have the status of city or township by 1 January 2015. It amounts to total of 5,685 municipalities; their land registries represent 75.5 % of the state territory, and 29.6 % of Czech population live there.

[247] Ibid.; further compare. MAIER, K.; FRANKE, D. (2015) Trendy prostorové sociálně-ekonomické polarizace v Česku 2001–2011. *Sociologický časopis* 51(1), pp. 99.

Suburbanisation supports growth in transportation

964. Due to suburbanisation, car traffic is increasing in the catchment areas of cities and in cities themselves.[248] More and more people in industrialised countries regularly commute to work. Job opportunities are often in places away from home. However, suburbanisation contributes significantly to commuting. Moreover, there is a specific problem in the Czech Republic - the transportation network is mostly directed towards Prague and the regional centres lack interconnections. This is evident in the Czech Republic by a dramatic increase in traffic requiring ever larger areas, creating extensive barriers throughout the territory (motorways, airports, etc.) and corridors negatively affected by emissions and noise.

Mobility growth concerns selected social groups

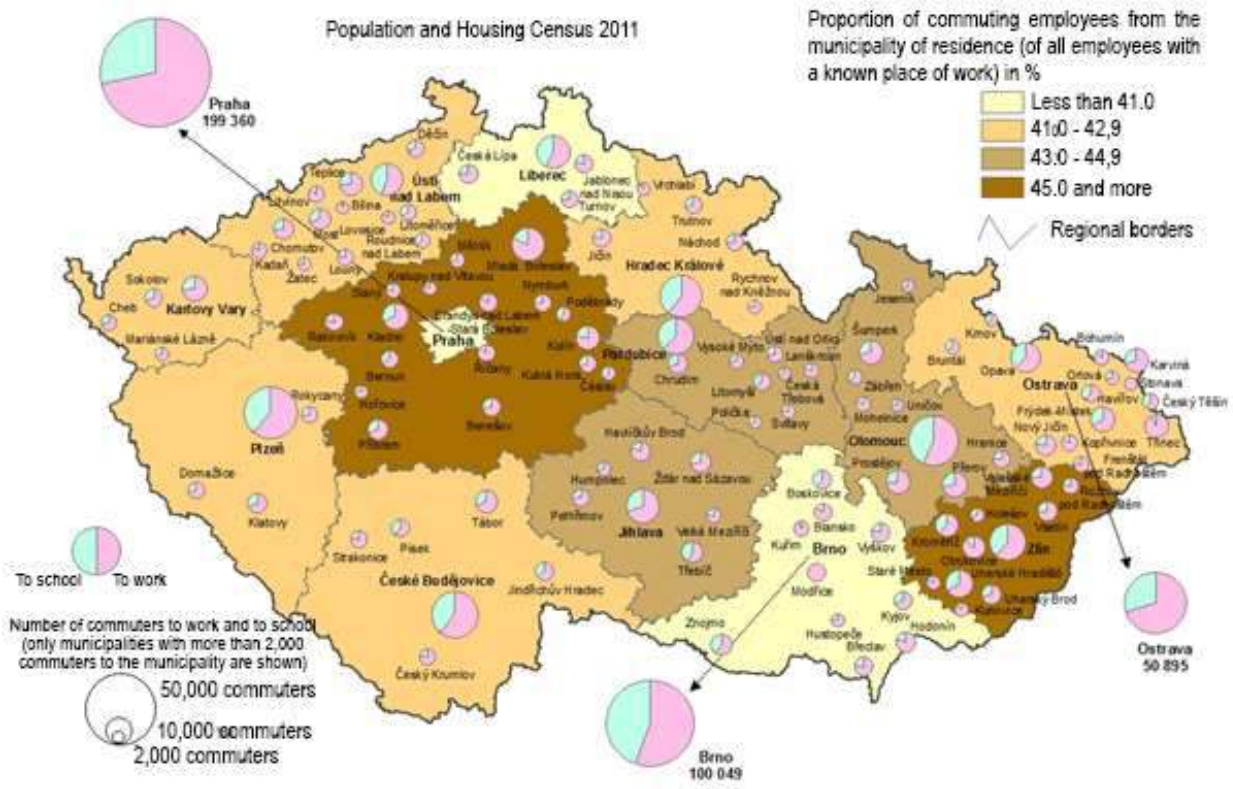
965. Increasing mobility concerns and will mainly concern certain social groups. The first of these are highly qualified, economically active people - especially in managerial positions. Because of work for multinational enterprises, they are often moving, often on a global scale. The second group is people at the opposite end of the spectrum - less qualified employees, affected by growing precarisation. In their case, mobility is currently evident from long-distance commuting from a lower-cost location of residence to centres where there is a greater demand for work.

Commuting to schools and to work increases

966. According to SLDB 2011, almost one in every seven Czech citizens commuted to schools and places of employment.[249] Good examples are the Zlín Region and the Prague Region (see Figure 4.3) to which people from the Central Bohemia Region commute in particular. In 2014, one fifth of people working in the metropolis were commuting to work from surrounding towns and cities.[250] Ten years earlier, the figure was 40 % less.

[248] In the year-on-year comparison, a downward trend in the use of public transport can be observed in most regions. OG CR (2016) *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky*, pp. 124.
[249] The commute was also mapped at the municipal level, or more specifically at the level of basic settlement units, which amount almost to 23,000. Data refers only to employees, pupils, students and apprentices. The statistics do not include people without a permanent workplace.
[250] IPR (2014) *Dojížďka a vyjížďka do zaměstnání do/z hl. m. Prahy*.

Figure 4.3 Commutes to workplaces and schools. Source: CZSO (2014) *Dojížďka do zaměstnání a do škol podle Sčítání lidu, domů a bytů 2011. Commuter currents.*



Consequences of increasing mobility

967. Due to more traffic on the roads, there also more people exposed to excessive noise and smog. The noise is the most burdening aspect, especially from road traffic, in agglomerations of Pilsen, Prague and Brno, where approximately one in every 10th inhabitant suffers from excessive noise.[251] In smaller villages around large cities and recreationally attractive places, the sewerage system, waste collection and other technical infrastructure are also overloaded.[252]

How the growth of mobility impacts on civic amenities

968. The growing mobility of people also transforms the distribution of amenities.[253] In small municipalities, they often do not pay for services, so they leave restaurants, post offices, schools,[254] libraries[255] and also restaurants in places which are not exposed to tourism. The accessibility of

[251] CENIA; MoE CR (2015) *Zpráva o životním prostředí ČR 2014*.
[252] MoE CR (2010) *Strategický rámec udržitelného rozvoje ČR* (2010), pp. 40.
[253] MAIER, K. (2009) Polycentric development in the spatial development policy of the Czech Republic. *Urban Research & Practice* 2(3), pp. 327.
[254] Since 2005, 700 secondary schools and 359 elementary schools have decreased, while the number of kindergartens has increased by 375. Compare MEDU CR (2016) *Vývojová ročenka školství 2005/06–2015/2016*.
[255] Between 1995 and 2015, the number of libraries with non-professional workers dropped by 848 to total of 4,554. Despite that, the library network can still be considered above standard in comparison with EU average, see NIPOS (2016) *Kultura České republiky v číslech*, pp. 10–12.

larger cities by public transport has also deteriorated in many locations. It is one of the reasons young people are leaving.

Brownfield sites represent another result of economic mobility at the global level

969. The increasing availability of cheap goods from all over the world exposes domestic producers to stronger competition, forcing them to restructuralise their operation or, in the worst cases, even to terminate their operations. Abandoned industrial or agricultural - but also residential and military - premises stand unused and deteriorating. They form such impenetrable parts of landscapes or cities where people at the edge of society often concentrate. Besides these, new operations created "from scratch" emerge, occupying the soil unnecessarily and endangering ecosystem stability.

Digitalisation does not have to reduce mobility

970. Digitalisation transforms demands on spatial anchoring of work. Its indeterminacy and transforming organisation is reflected in irregular commuting. New forms of work represent a post-industrial transition from concentration on space to qualitative concentration (more intense and different types of work). The latest 2011 census showed that 13 % of the population commuting daily did not have permanent (tied to a specific location) employment. However, the proportion of such persons is actually higher if we add to this figure people who work from home and those working on the road. That is why there is also a growing proportion of people whose jobs - and, consequently, lifestyle - do not have routine shifts with a fixed start and finish.[256]

4.2 Regional inequalities

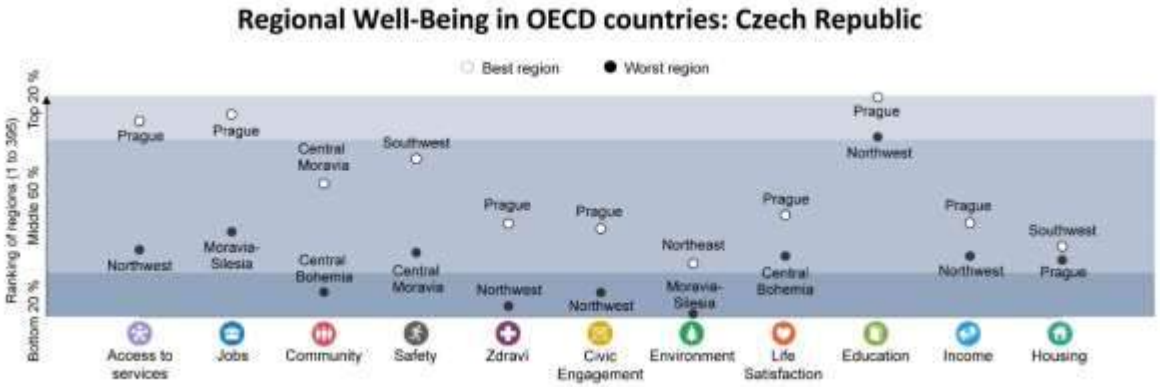
The status of the Czech Republic's regions is average within the OECD

971. Differences in the status of regions within OECD between various parts of the world as well as parts of states have been deepening in recent decades. The OECD notes that "the non-monetary indicators of living standards show that differences among regions of one country are frequently deeper than between different countries".[257] Although inequalities in education or in access to services are being reduced, the differences in income, air quality and security are increasing. Income in households in metropolitan areas is 17 % higher than in other households; at the same time, the metropolitan households spend up to 15 % more on housing. Differences between regions are exacerbated by the increasing number of relocations of younger people who are searching for a better life; in 26 of the 33 OECD countries, the proportion of people over the age of 65 living in the country is growing.[258] OECD statistics on well-being in NUTS II regions, the eight Czech regions place in the second half of OECD countries with a lower quality of life in most of the monitored indicators. The worst results of the Czech regions are in connection with (low) civic engagement and (poor) health status. They rank at the level of Visegrad neighbours or some Israeli

[256] SVOBODA, P.; OUŘEDNÍČEK, M. (2015) Flexibilita a lokalizace práce. *Ekonomický časopis* 63(5).
[257] OECD (2015) *OECD360 Česká republika 2015.*
[258] OECD (2016) *Regions at a Glance 2016*.

regions (Haifa, Tel Aviv). The degree of difference between Czech regions is around average compared to other OECD countries.

Diagram 4.1 Comparison of regions of the Czech Republic in the areas of quality of life compared to OECD regions. Source: OECD (2016) *Regional Well-Being in OECD countries: Czech Republic*.



Development of regional inequalities in the Czech Republic

972. Until 2007, differences between parts of the Czech Republic have been increasing, as the quality of life improved more in Prague than in the rest of the country. Mutual differences between the regions grew only slightly. In the years of the economic crisis, the capital began to stagnate, so this trend does not go on. Average household incomes and debt developed at a similar rate in the regions.[259] A factor contributing to increasing the gap between the city and the country is the budget tax determination which favours large cities. However, since 2013, the calculation method has partially changed in favour of smaller municipalities. The number of inhabitants remains the decisive criterion, but after the introduction of the transition coefficients, there are no incremental differences. The calculation takes into account the number of pupils and sets a limit for the criterion of the municipality's size; however, even in this situation, small municipalities do not qualify for large investment subsidies and loans and have no possibility of developing their infrastructure. On the other hand, it should not be forgotten that large cities provide infrastructure and civic amenities not only for their inhabitants but also for populations outside of urban areas.

Prague - the first among the regions

973. There are several reasons for the economic differences between Prague and the regions. The metropolis is home to a number of companies with production and operation facilities elsewhere. The high rate of commuting to Prague, central office spending, the concentration of most services in the capital (finance, insurance, telecommunications), higher price levels and high wages and salaries, also contribute since companies operating in more regions assign the gross added value to their facilities

[259] OG CR (2016) *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky*, pp. 121 and further below.

accordingly[260] and higher revenue from budget tax determination is also a factor.

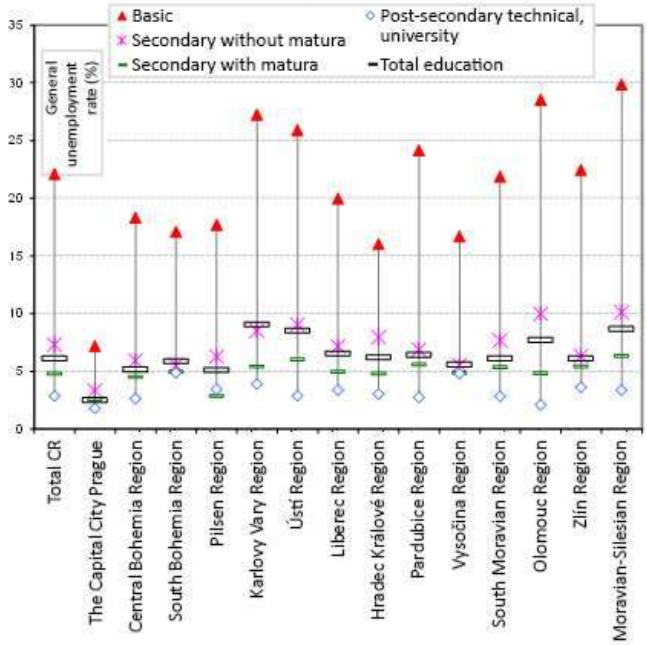
R&D expenditure

974. In addition to revenues, research and development expenditure is also concentrated in Prague. About 15 % behind it, regional cities with large universities follow (Brno, Ostrava) and the Central Bohemian Region as a catchment area for Prague's companies and universities.[261]

Differences in unemployment rate among regions diminished

975. Regional disparities in unemployment rate and social exclusion (unemployment rate over one year) also declined during the recession after 2007. The persistent differences exist mainly due to a lack of work for people with a basic level of education. In all regions except Prague, the female unemployment rate is higher than the male unemployment rate, mostly in Liberec.[262]

Diagram 4.2 Unemployment rates by education achieved in various regions, 2014. Source: OG CR (2016) *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky*, pp. 107.



Poverty and people at risk of poverty

976. Parental education and regional affiliation strongly contribute to poverty. The Czech Republic is one of the countries with the greatest link between social-economic background and students' educational outcomes (see key area People and society).[263] Their ability to solve problems is affected by the average social-economic background of the region by more

[260] OG CR (2016) *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky*, pp. 103 and further below.
[261] OG CR (2016) *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky*, pp. 110 and further below.
[262] OG CR (2016) *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky*, pp. 106 and further below; MRD CR (2013) *Strategie regionálního rozvoje ČR 2014-2020*, pp. 33.
[263] CSI (2013) *Hlavní zjištění PISA 2012*, pp. 6.

than 40 %.[264] Therefore, it is not easy to get out of it. The social structure does not contribute to the poverty of vulnerable populations to reduce regional inequalities. Almost one third of the poor are below the critical 60 % of the income median (harmonised with the purchasing power parity). The most vulnerable groups are the unemployed, self-employed, elderly citizens, and the economically inactive part of the population, single-parent households with at least one child, as well as children living in families where family members work very little or not at all.[265]

The number of socially excluded localities is increasing

977. Over the past decade, the number of socially excluded localities with poor and unemployed people without a secure future has doubled. It has been evident in all regions. The most excluded localities are located in regions facing economic problems, namely the regions of Ústí, Karlovy Vary and in the Moravian-Silesian Region.[266] Poor people and people at risk of poverty are forced to move to places with higher unemployment, fewer opportunities, but with cheaper housing, which causes fluctuations of socially excluded people. Nevertheless, people at risk of poverty pay nearly twice as much (40 %) for housing than households do on average in the Czech Republic.[267]

Causes of emergence of socially excluded localities

978. Expansion and persistence of socially excluded localities is the result of many processes. In particular, the disappearance of low-skilled jobs has resulted in long-term unemployment in these regions, which subsequently has led to poverty and social exclusion of the local population. Emerging social problems in the area were often not identified in time or remained without adequate political response for too long, or policies were accepted that made these problems even worse (e.g. neglect of preventive programmes, limiting access for socially excluded people to municipal housing, inconsistent setting of welfare systems, or in extreme cases direct support for the relocation of the socially excluded to disadvantaged municipalities or regions). At national or local level, the synergies of the unequal status of socially excluded households and business practices in the real estate market, the set-up of financial services or short-term loans leading to targeted debt amongst the population of excluded localities have not been addressed in time. The resulting problems have subsequently been exacerbated by migration. Transformation processes in the housing sector (restitution, privatisation, deregulation of rent, etc.) and differentiation of housing costs have created incentives for the departure of poor citizens from the cities that are centres new job opportunities into places with higher unemployment rate, fewer opportunities and therefore greater social problems, but with cheaper

[264] CSI (2014) *Hlavní zjištění PISA 2012*, pp. 22. However, the authors of the study draw attention to the fact that the results of regions "may be affected by the non-standard result of one or more selected schools."
[265] PROKOP, D. (2016) Chudoba je v ČR daleko hlubší, než se běžně usuzuje - an interview with Daniel Prokop. *Rozhovor Britských listů*.
DUBSKÁ, D.; ZEMAN, J. (2015) *Analýza vývoje indikátorů nerovnosti v ČR a jejich dopad na růstový potenciál ČR*, pp. 5.
[266] GAC (2015) *Analýza sociálně vyloučených lokalit v ČR*.
[267] MLSA CR (2015) *Koncepce sociálního bydlení České republiky 2015–2025*, pp. 27.

housing (in the later years, the rule of low rents due to housing benefits did not apply, poor people move to landlords oriented on persons and families reliant on social benefits). On the other hand, mainly young people with better education leave areas with the most concentrated areas of socially excluded localities, mainly because of limited employment prospects.

Social exclusion leads to inequalities within the regions

979. The concentration of poor people in socially excluded areas brings further problems to regions hit by economic and social inequalities. The loss of human capital further reduces the capacity of these regions to adapt to the situation and to effectively apply for and use the available programmes to promote social inclusion and regional development. At the regional level, these include in particular the Karlovy Vary Region, the Moravian-Silesian Region and the Ústí Region, where most of the socially excluded localities are concentrated. At the same time, however, there is a general increase in differentiation between municipalities. Also within these regions there are often relatively close communities with relatively large socially excluded localities and successfully developing municipalities.

Air quality is no longer improving

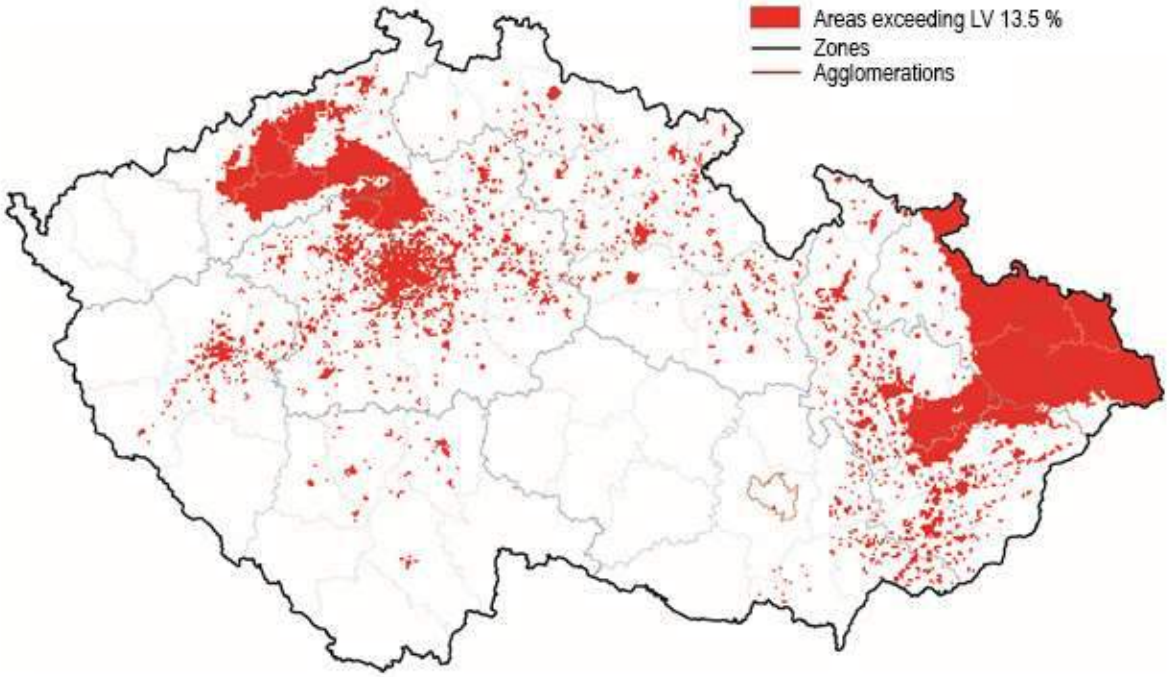
980. Although some types of pollution have been significantly reduced, large regional differences in air quality persist. Emissions of sulphur dioxide fell by 93 % between 1990 and 2014, but the concentrations of carcinogenic benzo(a)pyrene and micro-particles of flying dust (PM_{10}) remain high and have ceased to drop. The amount of benzo(a)pyrene and PM_{10} exceeds limits in the places where roughly half, or more specifically, a quarter of the population lives. Polluted air is most hazardous for children, the chronically sick and elderly people. On average, 6,000 to 8,000 people a year die due to pollution caused by PM_{10}.[268]

Air pollution types in the territory

981. Air pollution is not evenly distributed. It mainly affects three types of locations for various respective causes in which air pollution limit values are exceeded. In some industrial agglomerations, especially in the Ostrava Region or parts of the Ústí Region, it comes from large coal-burning plants (metallurgy, power stations). In large cities, it consists mainly of exhaust gases. Many rural communities or smaller towns suffer from the burning of solid fuels for domestic heating; only in 2013, 38 % of all PM_{10} emissions came from that.

[268] CENIA; MoE CR (2015) *Zpráva o životním prostředí ČR 2014*.

Figure 4.3 Designation of areas with exceeded emission limits (= LV) for the protection of human health (excluding tropospheric ozone), 2014. Source: CENIA; MoE CR (2015) *Zpráva o životním prostředí ČR 2014*, pp. 24.



4.3 The growing importance of non-state actors

Spatial public administration is close to people, and there are mechanisms for transparency in its performance

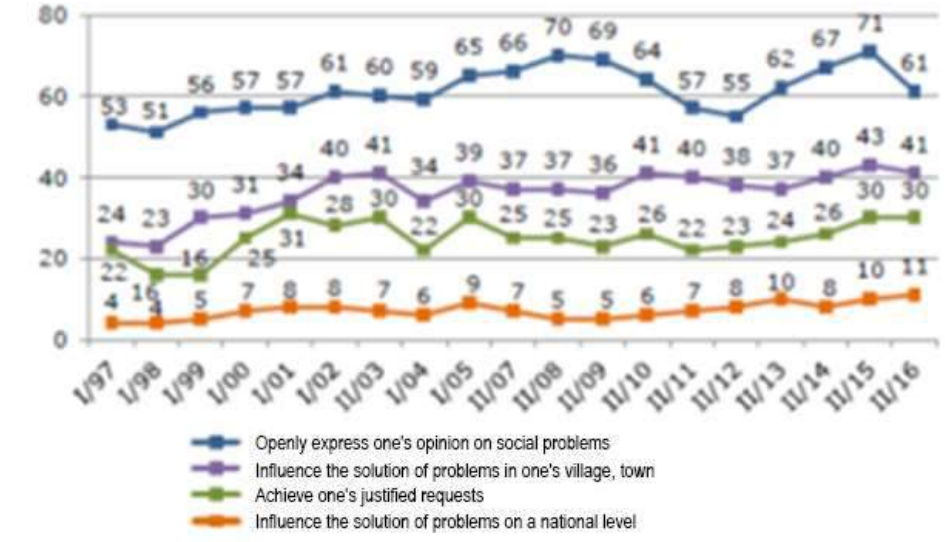
982. The administrative structure of the Czech Republic, consisting of more than 6,200 municipalities, is unique in Europe, with the only similar structure found in France. This means that particularly in smaller municipalities it is possible to transfer decision-making closer to citizens. On the one hand, people feel that cities and municipalities have a greater influence on decisions than at national level. Nevertheless, such an opinion has never been expressed by more than half of people (see Diagram 4.3). On the other hand, we see a number of partial improvements and efforts to increase the transparency of spatial public administration (contract register, public procurement, anti-corruption amendment of municipal laws, regions and the Capital City of Prague, online transmissions from meetings of local councils or public negotiation of investment plans of towns and municipalities).[269] The issue of extending the powers of the Supreme Audit Office to control the management of the assets of territorial self-governing units and the revenues and expenditures of their budgets remains unresolved.

[269] TI (2016) *Index vnímání korupce 2015*.

Spatial public administration is unable to handle the pressure from non-state actors in a systemic way

983. However, the informal nature of communal politics often contributes to suspicions of corruption and clientelism. Thus, a large section of the public perceives – often unjustifiably - the decision of officials/civil servants or politicians in the spatial public administration as non-transparent and more favourable to developers.[270] Spatial public administration is still often confronted with problems in terms of handling private pressures, especially corruption,[271] and may be non-objective in the performance of some agendas. The annual reports of the Security Information Service repeatedly highlight the high level of corruption at the municipal level and promotion of particular interests, especially in the area of public procurement, subsidies and the management of municipal property. According to these reports, influential groups are able to intervene in the decision-making of councils and eliminate the influence of local administration.[272] Thus, the capacity, strength and quality of public administration are often insufficient to transparently reconcile with particular interests and to set sustainable policies and, in particular, they are subject to chronic underfunding.

Diagram 4.3 Possibilities of citizens' influence on the public sector in chronological comparison (in %). Source: CVVM (2016) *Výzkum Naše společnost, v 16-02, Zájem politiků o občany a možnosti občanů ovlivnit veřejnou sféru*.



Note: the proportion of the sum of statements "definitely yes" and "rather yes" is indicated
Zdroj: CVVM SOÚ AV ČR, v.v.i., Naše společnost.

[270] From the point of view of public opinion, decisive factors for politicians' decision-making over the long term of 2003-2016 are bribery and corruption, interest groups and lobby, media and personal relationships, cf. CVVM (2016) *Výzkum Naše společnost, v 16-03, Vliv na politické rozhodování*.
[271] MoI CR (2014) *Hodnotící zpráva k výsledkům kontrol výkonu přenesené a samostatné působnosti svěřené orgánům obcí, krajů a hlavního města Prahy za léta 2012–2013*, pp. 51.
[272] BIS (2012) *Výroční zpráva Bezpečnostní informační služby za rok 2011;* BIS *(2013) Výroční zpráva Bezpečnostní informační služby za rok 2012*; BIS *(2016) Výroční zpráva Bezpečnostní informační služby za rok 2015.*

The non-transparent involvement of non-state actors is caused by the low level of cooperation in public administrations

984. The opportunity for non-transparent and selective engagement of non-state actors promoting partial interests also supports the situation where the agendas and concepts are not always linked. In addition, there are often competitive conflicts between the state, regions and municipalities. The state's decision-making on major infrastructure projects is therefore increasingly being referenced to the use of power tools or resignation to original intentions.

The non-transparent influence of non-state actors had a negative impact on spatial development

985. Even in spatial planning, the importance of non-state actors is increasing. In particular, there are pressures from various investors and developers for the decision-making or sale of communal plots. Some municipalities do not have a spatial plan or, they cannot actively use it in their decision-making or cannot estimate the real benefits of individual investor intentions.[273] The practical consequence has been the chaotic, incoherent construction of satellite settlements; the placement of industrial enterprises or capacity roads in the vicinity of residential buildings; poorly planned construction disturbing the landscape or urban life.[274]

Platforms for interest bargaining exist at national and regional level

986. Gradually, a number of institutions have emerged to help find consensus or compromise solutions - for example tripartite, including the regional level, 12 professional chambers established by law, and others without compulsory membership. For the time being, it is difficult to evaluate the work of the Permanent Regional Conferences associated into the National Permanent Conference, which were established in 2015, bringing together representatives from both the state administration and outside of it. Their aim is to coordinate the drawings from the ESIF and to ensure that their use is based on the needs of the target area.[275] At the local level, however, similar, long-term and conceptually developed platforms are missing that would moderate regional and local decision-making on its development, territory or construction and address conflicts.

The growth of the importance of non-state actors also represents development of civil society

987. The expression of growth of importance of non-state actors has also manifested in the life of municipalities through improved organised civil society. Naturally, various organisations and initiatives have different interests, goals and tasks, and their behaviour and decision-making cannot always be considered flawless. Nevertheless, their contribution is not negligible. Service NGOs have often professionalised and replaced some of the state's functions, particularly in the area of social services, education, and culture. Most non-profit organisations, converted their number per 100,000 inhabitants of the region, are based in Prague. In all regions except the Moravian-Silesian Region, their number is about 1,000. Over the

[273] Compare DURDÍK, P. (2013) Vlastnická práva a územní plánování. *Moderní obec*.[online] For more details on unfair developer practices cf. the decision of the Supreme Administrative Court, which concerned the change of the so-called floor space index, cf.SUPREME ADMINISTRATIVE COURT (2014) *2943/2014 Col. NSS*.
[274] PA (2007) *Souhrnná zpráva o činnosti veřejného ochránce práv za rok 2006*, pp. 34.
[275] For more details, see MRD CR. Územní dimenze. *Územní dimenze* [online].

past decade, both their number and the volume of services they provide have grown to more than CZK 56 billion a year in 2012.[276]

The municipalities are also getting organised to defend their interests

988. About 90 % of municipalities are involved in some form of inter-municipal cooperation.[277] It is by mutual association that municipalities become important (co)players of the central state administration and also significant non-state actors. There are a number of associations of towns and municipalities in the Czech Republic, but no association associates even half of about 6,200 municipalities. The most important municipal organisations are the Union of Towns and Municipalities of the Czech Republic (2,803 members),[278] the Association of Local Administrations of the Czech Republic (1,112 members), the Association for Rural Reconstruction (about 1,000 members); there are also smaller, specialised associations such as the National Network of Healthy Cities (130 members) and the Association of Secretaries of Municipal Authorities (311 members). Micro-regions, unions of municipalities, and contracts between municipalities that share services are also emerging. Municipalities may also conclude a public contract between themselves under which the authorities of one municipality will carry out the delegated (or part of the delegated) powers. In 2010, nearly 5,500 such contracts were closed and mainly affected the performance of the offence agenda.[279]

Municipal associations support the participation of citizens and involve actors from non-governmental sectors

989. The involvement of the public in decision-making and cooperation of non-state actors is systematically developed by two municipal organisations. Local *Agenda*21 implementers in the Czech Republic are associated with the National Network of Healthy Cities. The other organisation is the National Network of Local Action Groups of the Czech Republic (LAG), which features a *community-led development* (CLLD), a specific integrated tool. The LAG's associate, in the form of a legal entity, representatives of the public administration, the non-profit and the economic sector, jointly plan local subregional development funded by the European Common Strategic Framework.[280] An important condition is that the representative of any sector cannot have an over-representation in the LAG. Approximately 180 certified LAGs operate in the countryside[281] and cover more than 94 % of the territory of the Czech Republic. For the time being, there is no such tool for developing cities or neighbourhoods.

[276] PROUZOVÁ, Z. (2015) *Vývoj a současný stav českých NNO v makroekonomických ukazatelích*, pp. 16.
[277] OECD (2016) *Hospodářské přehledy OECD: Česká republika*, pp. 40.
[278] Data from 1 Jan 2013.
[279] MoI CR (2011) *Analýza aktuálního stavu veřejné správy*, pp. 38.
[280] EC (2014) *Komunitně vedený místní rozvoj*.
[281] Specifically, these are territories with a total population of 10,000-100,000 inhabitants without a city with more than 25,000 inhabitants.

4.4 Competence and quality of spatial public administration

Spatial public administration suffers from the same deficits as governance in the Czech Republic in general

990. Municipalities and cities - as well as other levels of public administration - also face shortcomings in democracy (civic engagement, cross-sectoral partnership building) and governance efficiency (public policy coherence, long-term strategic planning, under-use of tools and public-quality methods).[282] These are described in detail in Chapter 6. In addition, local administrations face their own problems.

The specificity of spatial public administration is the exercise of its own and delegated powers

991. The particular specificity of governance at local and regional levels and the competences of spatial public administration is the existence of local administration at two levels (municipalities and regions); in the case of statutory cities, there are also urban districts or city districts with their own local-administration bodies. In their competence (local administration), municipalities are responsible for important public services - education (regions and municipalities), transport (regions and municipalities), social services (regions and municipalities), refuse collection and sewerage (municipalities) and healthcare (regions and municipalities with health insurance companies).[283] The delegated powers are not exercised to the same extent by all municipalities but divided according to the three-level structure. Municipalities with delegated powers at the micro-regional level operate in the widest range. On a lower level, there are municipal authorities, the municipalities with the building authorities and the municipalities with the registry office are in various districts.[284] In future developments, attention will need to be paid to increased coordination in the exercise of delegated powers at this level.

MEC often fail to look after their entire district

992. The second stage of the public administration reform was created by municipalities with extended competence (MEC), which took over the greater part of the competencies of the district authorities and became the basic unit of state administration in the territory. Each of the current 205 MECs manages both their own administrative territory and the administrative district. The median MEC is approximately 300 km^2 with about 30,000 inhabitants. MECs should also carry out other tasks for municipalities in their administrative district to the extent stipulated by special laws, but they often struggle. For example, in the sphere of spatial planning there is a long-term perception of the shortage of workers in spatial planning authorities, which is manifested also by the insufficient range of services provided to the surrounding municipalities[285] or by the possible personal links between the spatial planning activity and the performance of the agenda in a separate competence. The regional

[282] Only 2 % of the local administration authorities apply quality management systems. MoI CR (2016) *Analýza využívání metod kvality ve veřejné správě*.
[283] OECD (2016) *Hospodářské přehledy OECD: Česká republika*, pp. 38.
[284] MoI CR (2011) *Analýza aktuálního stavu veřejné správy*, pp. 38.
[285] The analysis acknowledged by the government on 27. 6. 2016 clearly states: "The discovered fact that the overall situation in the occupancy of planning authorities has deteriorated in comparison to the year 2011 is alarming. There is a persistent problem with the increase in the size of a municipality with extended powers that decreases the range of services provided to other municipalities in its administrative district." MRD CR (2016) *Analýza stavu na úseku územního plánování a stavebního řádu*, pp. 93.

authority provides systematic and professional assistance in matters of delegated powers to municipal authorities.[286] This leads to alternatives to MEC being sought in practice. Excessive expectations in relation to the management of a wider area are imposed on the LAG, which they cannot meet because of their nature, as they cannot serve to manage the wider area as small districts.

Some municipalities have problems with the performance of their agenda

993. In some municipalities, the scope of the delegated powers is administratively burdensome and prevents them from providing public services at the required standard; moreover, they often have a problem in fulfilling basic local-administration activities, including the establishment of local administration bodies. The third group of problems may be the difficulties associated with reduced efficiency of fund allocation and control of the municipality management.[287] The administrative cost per capita is higher in small municipalities - the border at which the larger ceases to be cheaper is about 1,000-2,000 inhabitants. They also fail to provide key services such as preventive healthcare, childcare and long-term care (see also paragraph 959), although there is a lack of accurate comparisons between the size of the municipality and the quality of the services provided.[288] Therefore, less than 1,000 people are left with less money to invest.[289] However, reflections on the future of municipal establishment and administrative arrangements must also take into account the non-financial aspects, in particular the easy accessibility of local administration and the ability to engage in decision-making at the lowest level.

Financing of local authorities differs depending on their type

994. Municipalities and regions are predominantly funded by a combination of shared tax (both income tax and VAT) and transfers or subsidies from the state. Municipalities keep the proceeds from the property tax, the amount of which they can influence to a certain extent under the conditions provided by the law. In addition, they have revenues from local fees and infrastructure. More than 60 % of municipal budgets is covered by tax, while in regions, more than 60 % of revenue comes from transfers. Compared to other industrial countries, the regions and municipalities have relatively limited independence; they control only about 1 % of selected tax. Most of the money provided by the state is allocated for specific purposes.[290]

Most of the territory is already covered by municipal planning documentation

995. The proportion of the territory covered by municipal planning documentation increased between 1995 and 2014 from less than 20 % to 92 % of the territory of the Czech Republic.[291] At the end of 2016, all regions, including the Capital City of Prague have valid regional planning documentation (the so-called spatial development principles). The spatial plan should set the limit of land use and make an elaborate decision on

[286] *Zákon č. 128/2000 Sb. (o obcích)*, § 61.
[287] MoI CR (2011) *Analýza aktuálního stavu veřejné správy*, pp. 33.
[288] OECD (2016) *Hospodářské přehledy OECD: Česká republika*, pp. 39.
[289] OECD (2016) *OECD Economic Surveys: Czech Republic 2016*, pp. 117.
[290] OECD (2016) *Hospodářské přehledy OECD: Česká republika*, pp. 40.
[291] INSTITUTE FOR SPATIAL DEVELOPMENT (2016) *Evidence územně plánovací činnosti v České republice – data from 31 December 2015*, pp. 36.

how, when and where it will be used for construction and other purposes. Since joining the EU, the emphasis has gradually increased on strategic planning and management which should comprehensively determine the potential of the territory as far as possible.

Public participation is underdeveloped, and local agenda Agenda 21 has been dealing with it for a long time

996. After 1990 in the Czech environment, participation was often restricted to professionals and local elites, which ultimately led to a lack of interest. The ability to continuously engage the public is also a sign of good governance at local level. At present, it is most often used in strategic, spatial and financial planning, and in assessing the impact on the environment of concepts, spatial plans and intentions. It is also used in sectoral planning, e.g. in the creation of community planning of social services.[292] The local Agenda 21 (MA21) is a tool for cultivating local planning and debate, which is part of a comprehensive strategic process based on sustainable development analysis.[293] An increasing number of municipalities have joined it. Between 2006 and 2014, the number of participating municipalities has risen from 40 to 134 and the affected population from 800,000 to 5.3 million. The reason for the increase is the fact that LAGs, micro-regions, regions and some districts in Prague have also been involved in MA21.[294]

4.5 The impact of climate change on life in cities and municipalities

Global climate change is manifested locally

997. Over the coming decades, global climate change will transform life in the Czech lands, but especially in cities and municipalities. Their symptoms are always local and the solution must always be made with knowledge of the local situation. In general, urbanised areas do not adapt easily. A large proportion of developed areas and paved areas affects the micro-climate and causes surface overheating, higher air temperatures, stronger vapours, rapid drainage of rainwater or high levels of dustiness.[295]

Climate change is reflected in cities by rising average temperatures

998. Climate change is particularly evident in cities, particularly in the form of urban heat islands. Cities are a major producer of greenhouse gases and have a high carbon footprint. This is calculated as the sum of greenhouse gases from all city-level activities. The carbon footprint of the city is thus represented by the greenhouse gas emissions of all energy consumption in the city - from households, businesses, population and freight transport, from waste generation depending on recycling and other activities, and land use (land conversion rates for other uses); the greatest impact (70–80 %) is on energy consumption. In the Czech Republic, only

[292] MIČKA, P. (ed.) (2016) *Analýza občanské participace v České republice.*
[293] In 2012, the government approved the concept of support for the local agenda, see MoE CR (2012) *Koncepce podpory místní Agendy 21 v ČR to the year 2020*. Since 2014, it is specified as a method of quality for spatial public administration in the *Strategickém rámci rozvoje veřejné správy ČR* and follow-up implementation plans, see MoI CR (2016) *Strategický rámec rozvoje veřejné správy ČR pro období 2014–2020* (updated version, original 2014).
[294] OG CR (2016) *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky*, c.f. CENIA. *Portál MA21* [online].
[295] MoE CR (2015) *Strategie přizpůsobení se změně klimatu v podmínkách ČR*.

nine cities or city districts have measured their own carbon footprint. Although the carbon footprint per capita was below the national average, this trend cannot be evaluated optimistically due to the limited sample.

Economic aspects of climate change

999. The impact of climate change is difficult to predict and represents an area of high uncertainty with global implications. Both adaptation - adaptation to these changes - as well as possible inaction - non-adaptation - will bring significant costs. The financial burden associate with implementing the adaptation measures will be at least in the order of tens of billions of CZK. In spite of their long-term costs and distribution over time, however, adaptation measures will reduce the cost of tackling the negative impact of climate change in the event of inaction and will ensure sustainable economic gains (e.g. in forestry and agriculture), where revenue would drop due to the negative impact. We have to be aware that some adaptation measures have multiple beneficial effects (contribute to addressing the impact of climate change in multiple areas, or at the same time performing a mitigation function or have other side-benefits - e.g. social or environmental) or implemented regardless of climate change (maintenance, modernisation, innovation).[296]

Not all available measures are used to modify the urban micro-climate

1000. In many areas, there has been an underestimation of the importance of greenery in cities and towns, roof and climbing greenery in densely built areas, waterways, open water streams, fountains, and fountains for the micro-climate of settlements. Semi-permeable and permeable surfaces (e.g. grassing blocks) are used only in some areas instead of impermeable surfaces (e.g. compact paving) that do not allow water to seep in, thus accelerating water drainage. Collection and further use of rainwater (e.g. for further use in households, watering of public greenery or street cleaning) is currently not widespread. Towns and municipalities have little or no impact on events in the surrounding countryside, which will be increasingly reflected in their lives - farming on agricultural land, care for scattered greenery, small wetlands or river floodplains, adjustment of the water regime in agricultural and forestry holdings and water ducts and accumulation in order to prevent arable land from being washed away to the ditches and settlements during torrential rainfall.

Green spaces have grown

1001. The positive phenomenon is that between the years 2009 and 2015 the space allocated to greenery grew by almost 6,000 ha, whether in ornamental gardens, street and residential greenery, parks or other areas of functional and recreational greenery.[297] Incorporating natural components into an urbanised environment greatly enhances people's quality of life and provides a range of ecosystem services. It represents a significant contribution to wild species capable of adapting to the settlement's

[296] MoE CR (2017) *Národní akční plán adaptace na změnu klimatu.*
[297] C.f. State Administration of Land Surveying and Cadastre (ČÚZK) (2016) *Souhrnné přehledy* o *půdním fondu z údajů katastru nemovitostí ČR 2009–2015.*

environment, and it is also an opportunity for targeted, illustrative public awareness.[298]

Infrastructure for cycling mobility is evenly distributed between municipalities and nature

1002. In 2011, there were 1,903 km of cycling routes and roads suitable for cyclists available in the Czech Republic, 84 % of which were cycling routes and 16% were roads suitable for cycling. More than half (53 %) of the total length of cycling routes and roads suitable for cyclists were located in the more developed parts of municipalities. The largest network of cycling routes was in the capital city of Prague and the Central Bohemian Region.[299]

The number of buildings constructed in accordance with the high energy standard is increasing slowly

1003. The construction and operation of buildings where people spend 85-90 % of their time is an important source of energy savings, but they are unable to benefit from such savings.[300] In addition, energy-saving buildings help with our adaptation to climate change, because energy-inefficient buildings are exposed to the risk of overheating or undercooling of the indoor environment. Since 2009, new buildings and buildings with a total area of more than 1,000 m^2, which have undergone major changes, have to prove their energy performance through a certificate. The certificate provides a rating based on seven energy classes (A-G); new buildings can only be found in A-C classes.[301] Gradually by 2020, it will also be mandatory for new buildings to meet the energy performance requirements of nearly zero-energy buildings. However, a reduction of the energy intensity of completed buildings, whether administrative or residential, is yet to be achieved. Most of the completed buildings are therefore considered economical; the proportion of buildings rated as very energy-saving and extremely energy-saving is slowly increasing.

[298] MoE CR (2016) *Strategie ochrany biologické rozmanitosti České republiky 2016–2025.*
[299] MT CR; TRANSPORT RESEARCH CENTRE. Statistics - Bicycle trails. *Cyklodoprava*. [online].
[300] MRD CR (2014) *Výsledky intervencí ze strukturálních fondů a Fondu soudržnosti dosažené v tematických oblastech v letech 2007–2013.*
[301] Furthermore, see *Regulation No. 78/2013 Coll., on the energy performance of buildings*.

Chart 4.2 Comparison of the proportion of completed buildings by energy class and their costs during years 2010–2015. Source: CZSO, upon personal demand.

	The proportion of the number of completed buildings by energy class			The proportion of investment costs for building construction		
Year	Class A	Class B	Class C	Class A	Class B	Class C
2015	6 %	41 %	53 %	6 %	48 %	46 %
2014	5 %	34 %	61 %	6 %	37 %	57 %
2013	4 %	30 %	66 %	5 %	35 %	60 %
2012	4 %	30 %	66 %	8 %	33 %	59 %
2011	4 %	30 %	66 %	7 %	32 %	61 %
2010	4 %	30 %	66 %	4 %	30 %	66 %

5 Global development

5.1 Global sustainable development agenda and international organisations

Developments in the international arena in the area of sustainable development agenda

1004. Throughout 2015, the international community has, after several years of negotiations, concluded several important agreements that will direct global development in the years and decades to come. The most significant are undoubtedly the climate agreement adopted in Paris[302] in December 2015 and the Sustainable Development Objectives adopted in September by the United Nations summit as part of the so-called *Agenda 2030 for Sustainable Development*.[303] Other significant agreements at a global level include the Addis Ababa *Action Agenda*[304], the Sendai *Global Action plan*[305] and the Nairobi World Trade Organization Conference on trade liberalisation.[306]

The role of the European Union around sustainable development

1005. Membership to the European Union is the main driver for prosperity and sustainable development for the Czech Republic. The internal market and cooperation in important areas such as the common trade policy, common environmental rules, energy and climate legislation or cohesion policy, i.e. financial aid to economically weaker states by stronger member states, all contribute to them. In 2004, the European Union had agreed on its own *Sustainable Development Strategy*, which it updated two years later. The *Europe 2020* plan, the European Union's 2010-2020 development document, also determines important directions. In addition, sustainable development is one of the priorities of the new European Union *Global Strategy for Foreign and Security Policy*. Also, the inclusion of the Sustainable Development Objective No. 16 *Peace, Justice and Strong Institutions* into the common global framework of *Agenda 2030* is a result of the successful promotion of the Czech Republic's priorities in cooperation with the European Union.

Contribution of the Czech Republic to shaping the global environment

1006. The Czech Republic has a strong reputation in the world for the promotion of democracy, justice and human rights. This emphasis is also reflected in the long-term implementation of Czech foreign policy, which is widely accepted and is part of the relevant basic conceptual documents.[307] The Czech Republic also wants to maintain this priority in its work on global sustainable development. The Czech Republic has a history of successful diplomacy in the field of sustainable development and the potential for further success in multilateral organisations. It has specific Czech experience, which stems mainly from its own transformation after

[302] UN (2015) *Paris Agreement.*
[303] UN (2015) *Transforming Our World*.
[304] UN (2015) *The Addis Ababa Action Agenda of the Third International Conference on Financing for Development.*
[305] UN (2015) *Sendai Framework for Disaster Risk Reduction 2015–2030.*
[306] WTO (2015) *Ministerial Conference, Tenth Session – Ministerial Declaration and Decisions.*
[307] MFA CR (2015) *Koncepce zahraniční politiky ČR*.

1989.[308] At that time, it created new legislation, institutions and a regulatory framework that governs the public sector and social policies. It can also share its experience with a relatively high level of cooperation between public administration and civil society in social services, environmental protection, minority protection, and foreign development cooperation. As one of the countries with the world's lowest income inequality, it has experience that it can share with its foreign partners.

Czech Republic operating in international organisations

1007. Besides the European Union structures, the Czech Republic is a member of approximately 470 international organisations, conventions and processes. Members of all other EU countries are also members in one third of them. The Czech Republic contributes to 10 of these with more than CZK 100 million annually, by more than CZK 10 million to another 30 of them and more than CZK 1 million to another 76 of them.[309]

Benefits of membership to international organisations

1008. It is not possible to quantify many of the benefits of membership to international organisations for the Czech Republic's diplomacy and economy. They cannot simply be restricted to several immediate benefits - the influence, the application of the Czech expertise or the commission - nor can they be measured in terms of savings achieved. However, an in-depth analysis of the cost of membership to international organisations has been recently conducted which recommended greater coordination and more effective involvement in executive bodies and structures.[310] It also proposed the appointment of administrators with direct responsibility for systematic monitoring and annual evaluations of the costs of activities related to membership to international organisations.[311]

The work of Czechs in international organisations and in the European Union

1009. Approximately 550 Czech citizens work in international organisations, with approximately 850 citizens of the Czech Republic working in the EU institutions.[312] In 2015, the Office of the Government created for EU institutions an independent *Strategy for the Support of Czechs in the EU Institutions*.[313] A similar plan to identify the objectives, tools and funds needed to increase the representation of Czechs in other international organisations is not currently available in the Czech Republic. There are also virtually no rules for the official sharing of information by our citizens with the interest and professional groups that can operate in the area targeted by the particular organisation.

The work of the Czech Republic in the United Nations

1010. One of the global trends influencing the Czech Republic's activities in the world is the growing risk of a weakening of the current world order based on multilateralism and international law.[314] This enhances the importance of the Czech Republic's action in multilateral structures. The universal framework for this work is active membership in the United

[308] PEOPLE IN NEED, CR (2006) *Transformation*.
[309] MFA CR (2013) *Členství České republiky v mezinárodních organizacích.*
[310] Ibidem.
[311] Ibidem.
[312] Ibidem.
[313] This is a non-public document.
[314] MFA CR (2015) *Koncepce zahraniční politiky ČR.*

Nations, where the Czech Republic supports the reform towards a more efficient functioning of its organisation, including the reform of membership in the Security Council. An example of good practice is reflected in the work of the *United Nations Economic and Social Council*. ECOSOC is one of the most important UN bodies embedded directly in its Charter. The Council's task is to compile or initiate studies and reports on economic, social, cultural, educational and health topics. The Czech Republic was elected into ECOSOC for the period 2016-2018. In addition, it has occupied one of the three Vice-Chair positions for the period from July 2016 to July 2017. For the following period, the Czech Republic will apply for the presidency.

Agenda 2030 for Sustainable Development - New Global Development Framework

1011. *Agenda 2030*, including 17 *Sustainable Development Goals*, came into being after three years of negotiations that began at the UN Conference on Sustainable Development (Rio+20) in 2012. The Agenda builds on the *Millennium Development Goals* which set the framework for global development and the fight against poverty between 2000 and 2015. A number of successes have been evident with fulfilling the MDGs and reducing extreme poverty but some objectives still remain, i.e. inequalities still exist between men and women across the world, there are still gaps between the rich and the poor, between cities and the countryside; climate change and environmental degradation continue and go on to threaten the poorest, conflicts remain a major threat to human development and millions of people still live in poverty and hunger, without access to essential services.[315]

The transformational format of *Agenda 2030*

1012. For the first time, *Agenda 2030* has combined global social and economic development with its sustainability. It approaches sustainable development as an integrated agenda that encompasses various dimensions of human life - economic, social, environmental, cultural and political - which need to be consolidated. *Agenda 2030* places demands on both developed and developing countries and equally covers all three pillars of development - economic, social and environmental. It has created a sophisticated set of goals whereby one group cannot be met at the expense of the other, requiring states and world communities to overcome the sectoral approach to implementing their policies. In order to achieve better integration, coordination and policy coherence leading to *Agenda 2030*, we need quality institutions, strategic management, and generally good governance at national and international level. There will be coherent policies that will be implemented in a unified framework, and where the individual aspects of such policies will not contradict each other.

The Paris Climate Agreement and the *Green Climate Fund*

1013. One of the key milestones is the climate agreement adopted in Paris in December 2015. In the agreement, the international community agreed that it wants to keep the average global temperature rise to below 2 °C compared to the values prior to the industrial revolution, and not to exceed 1.5 °C. The aim is also to increase the ability of the world to adapt to the negative impact of climate change, i.e. to strengthen the resilience against

[315] UN (2015) *The Millennium Development Goals Report 2015.*

climate change so that the implemented measures also contribute to sustainable development. *Agenda 2030* and the Paris Agreement are closely intertwined. The *Green Climate Fund*, created at an international conference in Cancún, Mexico, in 2010, is intended to help developing countries in particular to reduce greenhouse gas emissions and adapt to the negative impact of climate change. Developed countries - the largest producers of greenhouse gas emissions - are expected to provide up to $ 100 billion a year to developing countries by 2020. The Czech Republic contributed CZK 110 million to the GCF in 2014-2016. Per capita, its contribution is the highest among all countries that joined the EU after 2004. However, since it is one of the countries with the highest greenhouse gas emissions per person in the EU, it would be appropriate to increase the contribution further.[316]

5.2 The impact of domestic Czech and European policies on global sustainable development

External impact of internal policies

1014. Promoting sustainable development beyond the country's borders often requires domestic action. However, it cannot be regarded as simply a case of formulating policies at a national level. On the one hand, it must involve the city, municipality and region; on the other hand, the international dimension is crucial. The world economy, politics and culture are so intertwined that one country's actions affect neighbouring countries and at the opposite end of the planet as well. The country must therefore coordinate its policies in environmental protection, world trade, and human rights.

The Czech Republic supports development in non-EU countries

1015. The Czech Republic supports development in third countries, particularly in terms of sustainable development and humanitarian aid[317], including the stabilisation of areas in the world where refugees come from or pass through. It also offers transformational cooperation, promotes democratic values and human rights, promotes institution building and good governance, sends out military and civilian missions, promotes a balanced multilateral trading system, economic diplomacy, social dialogue, research and education.

The level of official development cooperation

1016. As one of the member states joining the European Union after 2004, the Czech Republic has pledged to provide official development assistance of 0.33 % of gross national income by 2030. With regard to the level of official development assistance over the last 10 years, this objective remains a challenge for the Czech Republic. In 2015, the official development aid amounted to less than CZK 5 billion a year, or 0.12 % of gross national income. The medium-term expenditure frameworks for 2017-

[316] Available data GREEN CLIMATE FUND. Resources Mobilized. *Green Climate Fund* [online].
[317] MFA CR (2015) *Informace o zahraniční rozvojové spolupráci České republiky v roce 2015.*

2019 show plans to increase.[318] About 70 % of Czech aid is devoted to multilateral foreign development cooperation; over recent years, the state has spent approximately CZK 3 billion annually in this area.[319]

Cross-sectional criterion of sustainable development

1017. Strategic documents of the Ministry of Foreign Affairs, the *Concept of Foreign Development Cooperation*[320] and the *Strategy of Multilateral Development Cooperation of the Czech Republic*[321], have established sustainable development as the objective of the Czech Republic's development cooperation as well as a cross-sectional criterion for the evaluation of projects financed by the state. In addition to this criterion, it also states the given country's readiness to receive development aid, including the implementation of pre-established agreements. Another criterion is gender equality. The Transformation Cooperation Programme focuses on promoting good governance, the rule of law, justice and human rights, basically the Sustainable Development Goal No. 16.

Free trade and sustainable development

1018. As an open economy, the Czech Republic benefits from free trade with a strong global impact. Trade between the Czech Republic, the European Union and non-EU countries creates new opportunities beyond our borders. It helps millions of families to escape poverty, reduces global inequalities and moderates tension among states. However, unfair trade rules or barriers may stand in its way, for example, certain types of subsidies. A large part of society also has justifiable concerns that trade agreements may limit the right of states to use legitimate social, environmental or hygienic regulations.

Use of resources from third countries

1019. The Czech Republic indirectly influences natural resources and beyond its borders it has a significant influence.[322] The European Economic Area - including the Czech economy - is the largest market in the world. Cultivation of imported feed, palm oil and biofuels, tropical wood logging, extraction of oil and other minerals and fish farming often creates a significant pressure on resources and ecosystems in supplier countries.[323] At the same time, supplier countries are often in parts of the world where the natural biodiversity rate is substantially higher than in Europe. Draining their natural resources often goes beyond the limits of sustainability. For example, 29 % of marine fish stocks are overfarmed, beyond collapse or recovering from a collapse; another 61 % are fully utilised at the limit of sustainable consumption.[324]

---

[318] MFA CR (2016) *Plán ZRS na rok 2017.*; GOVERNMENT OF CR (2016) *Usnesení vlády ze dne 11. července 2016 č. 631 o dvoustranné zahraniční rozvojové spolupráci v roce 2017 a ke střednědobému výhledu jejího financování do roku 2019*.
[319] OECD (2016) *OECD Development Co-operation Peer Reviews.*
[320] MFA CR (2010) *Koncepce zahraniční rozvojové spolupráce České republiky na období 2010–2017.*
[321] MFA CR (2013) *Strategie mnohostranné rozvojové spolupráce ČR na období 2013–2017.*
[322] GREEN CIRCLE AND FRIENDS OF THE EARTH, CR (2005) *Česká stopa – ekologické a sociální dopady naší spotřeby za našimi hranicemi.*
[323] See e.g. EEA (2015) *European environment — state and outlook 2015.*
[324] FAO (2014) *The State of World Fisheries and Aquaculture*.

Influence of imports on the Czech Republic

1020. The Czech Republic imports a large volume of goods, particularly consumer goods. The working conditions in the countries of origin often do not meet Czech or European standards, and often do not even meet basic standards of human dignity. Indirectly by its demand, the economy significantly contributes to the increasing inequalities that feed on extremism and motivate migration.

Emission load caused by the Czech Republic

1021. With more than 10 tonnes per capita per year[325], the Czech Republic is one of the countries with high greenhouse gas emissions. In the European Union, it ranks within the top five countries in the year-on-year comparison. Czech emissions are significantly lower than those of the United States, Canada, Australia and the Gulf States, but higher than China and several times the amount of those of India, Indonesia, Brazil and Nigeria.

Finance and tax issues

1022. The Organisation for Economic Co-operation and Development estimates that the world's states are losing $ 100 billion to $ 240 billion a year to tax evasion, optimisation and so-called tax paradises.[326] The International Monetary Fund estimates this to be even as much as $ 600 billion a year.[327] This money is then missing from the budgets of both rich and developing countries, thus reducing the availability and quality of public services. There are no reliable numbers for the Czech Republic. However, the extrapolation of European and global estimates suggests that the numbers range somewhere between CZK 6 and 60 billion per year. The international side of the tax system is therefore an aspect of better tax collection in the Czech Republic and global financing of sustainable development.

Monitoring the coherence of the Czech Republic's policies

1023. In order for the Czech Republic to systematically monitor the extent to which its domestic decisions produce coherent results and through which specific policies it influences global sustainable development in the aforementioned areas, it must focus on the following topics[328] – trade policy; social and environmental standards; corporate social responsibility; intellectual property; goods and raw materials; tax and financial policy; climate change; energy; science, research and innovation in relation to climate change and food security; food security in the development policy of the European Union; common agricultural policy of the European Union; migration; reducing brain drain; remittances; safety; biodiversity; conflict response and failing (fragile) states.

[325] WB (2016) CO_2 emissions (metric tons per capita) *World Bank*. [online].
[326] OECD (2015) *Measuring and Monitoring BEPS.*
[327] CRIVELLI, E., DE MOOIJ, R., & KEEN, M. (2015) *Base Erosion, Profit Shifting and Developing Countries.*
[328] Selection based on the publication of EC (2013) *EU 2013 Report on Policy Coherence for Development*.

6 Good governance

Good governance and sustainable development

1024. Good governance is an integral part of sustainable development.[329] It is so already because most of our goals are achieved through public *policies*. However, there is no objective definition of good governance, not just in the context of sustainable development. There is only a broad shared belief that good governance should be both democratic and long-lasting. The topic of good governance cannot be approached analytically. The subject of interest, the point of view, as well as the methods of investigation used will always be the result of a choice made on the basis of cognitive and normative assumptions. Our perspective is, in the narrower sense, determined by the sustainable development objective contained in the *Agenda 2030*. At the same time, we take into account both the total assessments of the Czech Republic's position in international comparisons and the results of foreign expert analyses (also often involving the Czech Republic), as well as the results of domestic expert analyses prepared by the public administration or for its purposes. On these bases, we identify the issues that are crucial for sustainable development in the Czech Republic in the areas of democratic governance and long-term efficiency of governance.

How to measure the quality of governance cumulatively

1025. Measuring the quality of governance is not easy. Existing global indices of good governance have a number of limitations, and there is no benefit fixating on the charts which show minor one or two-point shifts in either direction. These indices should only be used for basic benchmarking.[330] In this way, we can see that the Czech Republic's position has been relatively good in terms of the world average over a long period of time, but it is below the OECD average and the Czech Republic is significantly lagging behind the top reference countries[331] (e.g. Sweden, Denmark, Norway). However, the differences are not the same in all directions. The Czech Republic is ranked high amongst the top performing countries in all respects, but if we split aggregate assessments into

[329] E.g. UN (2015) *Transforming Our World*; UN (2014) *The Road to Dignity by 2030*; UN (2012) *Resilient People, Resilient Planet*; EC (2015) *Sustainable development in the European* Union; EC (2013) *Sustainable development in the European Union*.

[330] In selecting indexes and aggregate assessments for basic benchmarking, primarily care was taken to cover various aspects of governance philosophy and various data collection and evaluation procedures. For the basic assessment, aggregated *Worldwide Governance Indicators* (WGI, six themed areas), the *Democracy Index* (one of WGI sources), the *Sustainable Governance Index* (not a WGI source), and two indices that focus on governance as on a single topic in a certain context, namely the *Global Innovation Index* (in the context of economic and social innovation, not a source of WGI) and the *Gender Equality Index* (in the context of gender equality, used as the official EU index, is not a source of WGI). Worldwide Governance Indicators*. World Bank* [online]; EIU (2016) *Democracy Index 2015*; BERTELSMANN STIFTUNG (2016*) Sustainable Governance Index 2016*; DUTTA, S.; LANVIN, B.; WUNSCH-VINCENT, S. (ed.) (2016) *The Global Innovation Index 2016*; EIGE (2015) *Gender Equality Index 2015*. The status of the Czech Republic has also been assessed on the basis of the *Varieties of Democracy* data (which appear to cover the various forms of democracy) and the data of the *Quality of Government* project (allowing good operationalisation of the subject of corruption while permitting a drop to the level associated with the regions), UNIVERSITY OF GOTHENBURG; KELLOGG INSTITUTE. Varieties of Democracy*. V-Dem* [online]; QOG INSTITUTE. Data. *Quality of Government Institute* [online].

[331] The reference countries in the topic of governance are the EU15 countries, Switzerland, Norway, USA, Canada, Australia and New Zealand.

individual parts, we can also find areas in which the Czech Republic is average or even slightly above the OECD average. Overall, it is safe to say that governance is undoubtedly democratic in our country, but there are weaknesses in the areas of governance, participation and political culture (e.g. political trust, preference for democratic/undemocratic forms of governance, etc.). Some problems may spill over into multiple areas (such as corruption)[332]; just because a problem occurs in one area, that is not to say it is already been solved where the problem first started. There continues to be a lack of domestic tools for systematic and comprehensive measurement of governance quality, especially the finer tools for evaluating public administration in the Czech Republic. Although some tools are already being prepared[333], it will be a few years before we start to see the benefits.

6.1 Democratic governance

Different concepts of democracy and the common need for participation

1026. We can understand democracy in various ways. It is possible to imagine a public debate based on it, in which we as citizens explain each other's attitudes and proposals, seek compromise or consensus based on our interests, or create both our interest and our democratic identity. We can also see it as a mechanism that simply allows a regular change of the ruling elite and allows it to influence the actions of this elite. However, in all cases, democracy is linked to the idea of an active participation of citizens in the decision-making process and in functional tools that bring the interests and ideas of citizens into the decision-making process.

Previous formats have worked, but remain unsatisfactory

1027. The political parties and elections to the embassies in the Czech Republic are the main instruments that facilitate public debate and ensure the interests and opinions of citizens are considered as part of the decision-making process. However, there is some concern that the idea of active citizenship and use of functional instruments, is not fully effective. Since the early 1990s, electoral participation in all types of elections has declined or has been relatively low over a number of years. Over the last decade, election participation has registered at about 60 % for first-rank elections, below 50 % for some time, and in some cases even below 30 % in the long-term perspective for second-line elections.[334] The number of

[332] In the context of corruption, we prefer to deal with impartiality, or more specifically with particularism and inequality in general, i.e. with the efforts of public officials (whether elected, appointed, or assigned on a meritocratic principle) to violate the principle of impartiality of exercising their function to achieve someone's private profit. Corruption in the public sector cannot therefore be perceived only as a classic form of bribery, but also in relation to phenomena such as clientelism, nepotism, patronage, discrimination based on financial means, race, sex, religion, etc. In operationalisation, we follow the institutionalist approach, see ROTHSTEIN, B. (2011) *The Quality of Government*, see QOG INSTITUTE FOR MORE INFORMATION. Data. *Quality of Government Institute* [online].

[333] MoI CR (2016) *Strategický rámec rozvoje veřejné správy ČR pro období 2014–2020* (updated version, the original is from 2014), objective 1.4.

[334] First-order elections are elections to the Parliament of the Czech Republic, Chamber of Deputies CR, second-order elections are other types of elections (the direct election of the president does not have its own specific category of election type). For the summary of the data, see OG CR (2016) *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky*, pp. 175–176; data continuously updated provided by election statistics by

members of political parties to form the basic instrument of representation is declining or has been relatively low over a number of years.[335] Parties as organisations are changing significantly.[336] This does not pose a problem in itself, but it affects their functions. There is a profound contradiction between the expectation and the actual fulfilment of the function of political parties. Over a number of years, only about 50 % of citizens believe that political parties are a necessary condition of democracy and that change can be made or influenced by joining them. When voting for political parties, our vote is usually based on our expectation of the benefits they will bring to society in general, but when we assess their effectiveness, it is usually reflective of how they have responded to our own individual needs.[337] It has been the case for a number of years now that only about 50 % of citizens believe that elections are an effective way to influence politicians, and fewer than 20 % think that they have an opportunity to influence what the elected representatives do.[338] This is also reflected in the fact that the party system, relatively stable since the beginning of the 1990s, has undergone deconsolidation since 2010, and fighting against the establishment has gained an increase in mobilising power in the party competition.[339]

CZSO available at: www.volby.cz. The declining trend is similar in the Czech Republic and the EU. However, the rate of decline in the Czech Republic is faster compared to the EU average, and, above all, the resulting participation is lower than the EU average. For European and global comparisons (for parliamentary, presidential, and EP elections), see INTERNATIONAL IDEA. Voter Turnout Database. *International Institute for Democracy and Electoral Assistance* [online] and IPA. PARLINE. Database on national Parliaments. *Inter-parliamentary Union* [online].

[335] Within Europe, the Czech Republic is among the countries with the lowest ratio of party members to eligible voters, and this proportion is further declining; this does not exclude the increase in the number of individual parties' members. The number of party members and their structure in total VAN HAUTE, E.; GAUJA, A. (ed.) (2015) *Party Members and Activists* and VAN BIEZEN, I.; POGUNTKE, T. (2014) The Decline of Membership-based Politics. *Party Politics* 20(2). For current data and survey results, see CPS. *Members and Activists of Political Parties.* [online], in case of CR with slight corrections at lower levels. The Czech Republic is included in all sources mentioned.

[336] The type of mass political party with which the idea of representation in the liberal democratic system has been associated becomes a past not only in terms of the number of members but also in terms of organisation. For summary, see SCARROW, S. (2015) *Beyond Party Members*; MAIR, P. (2013) *Ruling the void*; KROUWEL, A. (2012) *Party Transformation in European Democracies*. For information about Czech cases, see e.g. PECHÁČEK, Š. (2013) Personalizace v české politice. *Politologická revue* 19(2); HLOUŠEK, V. (2012) Věci veřejné. *Politologický časopis* 19(4); POLÁŠEK, M.; NOVOTNÝ, V.; PEROTTINO, M. ET AL. (2012) *Mezi masovou a kartelovou stranou*.

[337] CVVM (2015) *Výzkum Naše společnost, v 15-09, Názory veřejnosti na důvody vstupu do politické strany*, srovnání v časové řadě od roku 2003; CVVM (2016) *Výzkum Naše společnost, v 16-09. Postoje obyvatel České republiky k politickým stranám*, srovnání v časové řadě od roku 2005.

[338] CVVM (2016) *Výzkum Naše společnost, v 16-02*, *Angažovanost občanů a zájem o politiku*, comparison in the chronological order from 2004. The lower degree of trust in various aspects of the political system - not only in political parties - does not necessarily lead to a departure from political participation, but to deviation from formalistically institutionalised ways and an inclination to informal ways (e.g. demonstration), see BRAUN, D.; HUTTER, S. (2016) Political trust, extra-representational participation and the openness of political systems. *International Political Science Review* 37(2), or HOOGHE, M.; MARIEN, S. (2013) A Comparative Analysis of the Relation between Political Trust and Forms of Political Participation in Europe. *European Societes* 15(1).

[339] KOUBEK, J. (2010) České sněmovní volby 2010 z hlediska stability a změny stranického systému. *Politologická revue* 16 (1); the election of 2013 confirms the deconsolidation (the

Participation and representation are also linked to social conditions

1028. Increasingly, there is a link between the level of democratic participation and representation and social inequalities, or structural social inequalities. Those considered socially weaker participate less and the importance of this factor is increasing. However, the dependence of participation on a socio-economic position is not necessarily direct, sometimes the intervening variables affect the result.[340] Also, public support for the authoritarian form of government, or the belief that it does not matter if the arrangement is democratic, correlates with a low socio-economic status.[341] However, participation and representation are not only affected by socio-economic inequality, they also have other dimensions. The most prominent of these is the gender dimension. The representation of women in decision-making positions is generally very low.[342] Even if we limit ourselves to an explicitly political area, the representation of women is low[343], and the institutional and cultural barriers obviously play a significant role.[344]

How are problems solved elsewhere - liberal, participative, deliberative, and radical democracy

1029. These trends are not new and neither are they specifically related to the Czech Republic. They do not operate alone, rather they enhance each other. For this reason, over a number of years, many innovative and

volatility index is high, the so-called effective number of parties is growing, the share of the party system's core in the number of votes and mandates is decreasing).

[340] For participation in the form of elections, see LINEK, L. (2015) Účast ve sněmovních volbách v roce 2013. *Evropská volební studia* 10(2); LINEK, L (2013) Rostoucí sociální nerovnosti ve volební účasti v Česku v letech 1990–2010. *Naše společnost* 11(1). KOSTELECKÝ, T.; MIKEŠOVÁ, R.; POLÁKOVÁ, M; ČERMÁK, D; BERNARD, J.; ŠIMON, M. (2015) *Geografie výsledků parlamentních voleb.* V ČR se tím jen potvrzují výzkumy zahraniční, see ARMINGEON, K.; SCHÄDEL, L. (2015) Social Inequality in Political Participation, *West European Politics*, 38(1); SCHÄFER, A. (2013) Liberalization, Inequality and Democracy's Discontent, in SCHÄFER, A.; STREECK, W. (ed.) *Politics in the Age of Austerity*; GALLEGO, A. (2010) Understanding Unequal Turnout. *Electoral Studies*, 29(2); SOLT, F. (2008) Economic Inequality and Democratic Political Engagement. *American Journal of Political Science* 52(1). The survey concerning informal participation types shows the same results, see KERN, A.; MARIEN, S.; HOOGHE, M. (2015) Economic Crisis and Levels of Political Participation in Europe (2002–2010). *West European Politics* 38(3); only with a modification that at a time of economic crisis, the social-economic deprivation leads rather to the use of informal types of participation. There are differences between formal and informal ways of participation in the extent to which different inequalities are evident, see MARIEN, S.; HOOGHE, M.; QUINTELIER, E. (2010) Inequalities in Non-institutionalized Forms of Political Participation. *Political Studies* 58(1).

[341] CVVM (2016) *Výzkum Naše společnost,* in 16-02, *Názory veřejnosti na nedemokratické alternativy politického systému*, comparison in the chronological order from 2004. In the long-term, around 15 % of citizens feel that "the best thing would be to get rid of the parliament and elections and have a strong leader who would decide quickly on everything". In the long-term, over 20 % of citizens think that "for people like MoE it does not matter whether we have a democratic or undemocratic regime", see CVVM (2016) *Výzkum Naše společnost, in 16-02, Názory občanů na fungování demokracie a lidská práva v ČR.*

[342] For data, see OG CR (2016) *Akční plán pro vyrovnané zastoupení žen a mužů v rozhodovacích pozicích na léta 2016–2018*.

[343] For data on representative bodies, see FÓRUM 50 %. Gender representation in politics. *Fórum 50%* [online]; data on representative bodies and central state administration, see CZSO (2016) *Zaostřeno na ženy a muže – 2016*, section Veřejný život a rozhodování. For European and global comparison, see data at INTERNATIONAL IDEA. Gender Quotas Database. *International Institute for Democracy and Electoral Assistance* [online]; data IPA. Women in National Parliaments. *Inter-parliamentary Union* [online] and OECD (2014) *Women, Government and Policy Making in OECD Countries.*

[344] VOHLÍDALOVÁ, M; MAŘÍKOVÁ, H.; ČERMÁKOVÁ, M; VOLEJNÍČKOVÁ, R. (2016) *Sólo pro soprán*; KOUBA, K.; NÁLEPOVÁ, M.; FILIPEC, O. (2013) Proč jsou ženy v české politice podreprezentovány? *Politologický časopis* 20(4).

alternative solutions have been considered and implemented throughout the world. The current debate is, figuratively speaking, finds itself in an irregular quadrangle between liberal, participative, deliberative, and radical democracy. In a way, each of them interprets the theme of representation, participation and deliberation, and combines them in different ways. In practice, the basic model of representation associated with liberal democracy (elections and political parties) is still the most common, along with elements of participatory democracy (such as participatory budgeting, the proportion of citizens evaluating the impact of decisions on the environment or referendums)[345] and deliberative democracy (e.g. micro-deliberation in the form of so-called *mini-publics*) or *deliberative polls*, public participation in commenting on intentions and proposals of public administration or social dialogue.[346] In practice, Radical Democrats chose representative, participatory and deliberative democracy tools, although they interpret the meanings differently.[347]

How are problems solved elsewhere - focus on economic and social inequalities

1030. Public policies that alleviate or eliminate social inequalities or structural social inequalities are implemented, although the extent of these policies varies depending on political constellation, and the effects vary depending on countries and social groups. In any case, freedom and equal opportunities cannot be achieved without a social-economic dimension[348], and public policy can significantly influence, increase or reduce social inequalities.[349] Consequently, in light of the considerations of democratic governance, there is a degree of experimentation and consideration given to various forms of unconditional basic income,[350] and forms of democracy in agriculture,[351] etc. There is a very extensive range of tools that can be used to tackle gender inequalities, from improving the conditions for work-

[345] For various forms of participatory democracy see PATEMAN, C. (2012) Participatory Democracy Revisited. *Perspectives on Politics* 10 (1); BANG, H. (2010) Everyday Makers and Expert Citizens, in FENWICK, J; MCMILLAN, J. (ed.) *Public Management in the Postmodern Era;* DELLA PORTA, D. (2013) *Can Democracy Be Saved?*, či SMITH, G. (2009) *Democratic Innovations*. On examples of implementation, see e.g. RUTH, S. P.; WELP, Y.; WHITEHEAD, L. (ed.) (2017) *Let the people rule?* specifically on referendums QVORTRUP, M. (2014) Power to the People? But How? *Political Studies Review* 13(1) and QVORTRUP, M. (2013) *Direct Democracy* or overviews Initiative & Referendums Institute (IRI, IRI Europe and IRI Asia).
[346] For various forms of deliberative approaches, see ISERNIA, P; FISHKIN, J. (2014) The Europolis deliberative poll. *European Union Politics* 15(3); PARKINSON, J.; MANSBRIDGE J. (eds.) (2012) *Deliberative Systems*; FISHKIN, J. (2009) *When the People Speak*; DRYZEK, J. (2006) *Deliberative Global Politics*; for examples of implementation, see e.g. GRÖNLUND, K.; BÄCHTIGER, A.; SETÄLÄ, M. (2014) *Deliberative Mini-Publics* or overviews Center for Deliberative Democracy at Stanford University. Experiments show that deliberation can overcome even the polarization effect in equally-minded groups, let alone in the differently-minded groups, see GRÖNLUND, K.; HERNE, K.; SETÄLÄ, M. (2015) Does Enclave Deliberation Polarize Opinions? *Political Behaviour* 37(4).
[347] MOUFFE, C. (2013) *Agonistics*.
[348] For a theoretical and empirical reasoning, see e.g. SEN, A. (1995) *Development as Freedom*, empirical test GIEBLER, H.; MERKEL, W. (2016) Freedom and Equality in Democracies. *International Political Science Review* 37(5).
[349] E.g. DABLA-NORRIS, E.; KOCHHAR, K; SUPHAPHIPHAT, N.; RICKA, F.; TSOUNTA, E. (2015) *Causes and Consequences of Income Inequality*; PIKETTY, T. (2014) *Capital in the 21st Century*.
[350] VAN PARIJS, P. (1995) *Real Freedom for All*. For practical implementations overview, see MURRAY, M. C.; PATEMAN, C. (eds.); (2012) *Basic Income Worldwide* and BASIC INCOME EARTH NETWORK. *BIEN/Basic Income Earth Network* [online].
[351] WEEKS, J. (2014) *Economics of 1 %*; MALLESON, T. (2014) *After Occupy*; WOLFF, R. (2012) *Democracy at work*.

life balance to various forms of quotas or other formally institutional tools that provide direct representation.

The Czech Republic does not start with a solution from scratch

1031. Development in the Czech Republic follows a similar path to that followed in the reference countries, or more specifically in most OECD countries. The backbone of the political system is still made up of forms of representation associated with liberal democracy. There are elections not only for the two chambers of parliament or municipal councils, but also the regional councils, the European Parliament and the president. Transparency of political parties and elections is supported by the Act on Political Parties and Electoral Laws.[352] There are laws on local and regional referendums,[353] with 251 local referendums taking place over the past 10 years[354], and so far there has been no regional referendum since the law came into force. The general law on referendums has been discussed several times in the legislature, but no proposal has yet been accepted. Few municipalities invite citizens to make direct decisions on what they use their resources for.[355] The tripartite Council of Economic and Social Agreement of the Czech Republic (RHSD) also operates in the long-term perspective, although the quality of social dialogue differs according to political constellation. The government must publish draft legislation and the public is able to monitor the legislative process.[356] The deliberation can take place at the stage of legislation drafting[357], although the actual scope and particularly the quality of this deliberation is currently difficult to estimate. Some municipalities compile the local *Agenda 21* in which they plan their intentions with public participation[358], or they use other forms of cooperation.[359] The Environmental Impact Assessment (EIA) law allows people to comment on large constructions being built near to their

[352] *Zákon č. 302/2016 Sb., kterým se mění zákon č. 424/1991 Sb., o sdružování v politických stranách a v politických hnutích, ve znění pozdějších předpisů, a další související zákony; zákon č. 322/2016 Sb. kterým se mění volební zákony a další související zákony.*
[353] *Zákon č. 22/2004 Sb. o místním referendu a o změně některých zákonů; zákon č. 118/2010 Sb. o krajském refeferendu a změně některých zákonů, ve znění pozdějších předpisů.*
[354] Data summary in the records of the Ministry of the Interior. See MoI CR. Civic activities. *Ministry of the Interior of the Czech Republic* [online]; the last recorded local referendum of November 2016. Electoral participation in local referenda after 2010 also shows a downward trend, the initial electoral participation in the first-order elections has decreased, but still remains on average in the range of 40–50 %, i.e. similar to elections within municipal councils, see TI CR (2016) *Analysis of local referenda 2014*, pp. 56 et seq.
[355] AGORA CE. *Participativní rozpočet* [online].
[356] In the case of government, the process can be monitored in the public sector of the electronic library of legislation under preparation (eKLEP for the public - VeKLEP). The parliamentary process can also be monitored through the PSP CR and the CR Senate websites.
[357] MoI CR (2010) *Manuál pro zapojování veřejnosti do přípravy vládních dokumentů*; MoI CR (2009) *Metodika pro zapojování veřejnosti do přípravy vládních dokumentů*; system DataKO included in ODok.
[358] OG CR (2016) *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky*, pp. 115–116. Derived from an increase in the number of municipalities implementing MA21, involving participatory and deliberative practices with strategic management for sustainable local development.
[359] For problems of local level participation, see ČERMÁK, D.; VOBECKÁ, J. ET AL. (2011) *Spolupráce, partnerství a participace v místní veřejné správě*.

homes.[360] To solve some problems, a consensus is sought with the participation of political parties, experts and the public.[361] Social and civic dialogue can also take place at EU level. The Czech Republic also strives to mitigate social or structural social inequality, and does this successfully in some areas.[362]

Thorough planning, not just good intentions

1032. There is undoubtedly room for expanding or improving forms of representation through traditional channels (elections and political parties). However, there is a considerably larger untapped potential in utilising participative and deliberative approaches. This is particularly true in practice as tools already formally exist in some cases, but they are not sufficiently utilised. When expanding or improving forms of representation, participation and deliberation, we should not forget that any changes to the procedural rules have long-term impact and side-effects. For example, an increase in the frequency of elections may increase the level of representation, but it can also indirectly contribute to lower electoral participation or to the focus of political actors on short-term goals. Referendums used for inappropriate goals can continually reduce the representation of structural minorities. Deliberation can contribute to a greater effect and greater stability of the chosen solution, but it can also prolong the process of public policy preparation and poses greater demands on public administration.

6.2 Long-term efficiency of governance

Major issues of public administration already identified

1033. The many problems associated with the long-term efficiency of governance in the Czech Republic have been a subject of interest for a long time, especially in connection with the functioning of public administration and the creation of public policies. We can rely on public administration documents, especially thematic strategies, and to a lesser extent on analyses, methodologies and strategies which are sourced in particular from the Ministry of the Interior,[363] as well as from other authorities.[364] The results of academic research are also relevant.[365] The

[360] *Zákon č. 100/2001 Sb., o posuzování vlivu na životní prostředí a změně některých souvisejících zákonů, ve znění pozdějších předpisů.*
[361] E.g. Expert committee on retirement reform.
[362] OG CR (2016) *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky*, pp. 179–181; DUBSKÁ, D.; ZEMAN, J. (2015) *Analýza vývoje indikátorů nerovnosti v ČR a jejich dopad na růstový potenciál ČR*.
[363] MoI CR (2016) *Dopadová ex-post evaluace strategie realizace Smart Administration v období 2007–2015*; MoI CR (2016) *Výroční práva o stavu veřejné správy v ČR v roce 2015*; MoI CR (2016) *Analýza využívání metod kvality ve veřejné správě*; MoI CR (2016) *Analýza měření a hodnocení výkonu veřejné správy v ČR*; MoI CR (2016) *Strategický rámec rozvoje veřejné správy ČR pro období 2014–2020* (aktualizovaná verze, původní verze 2014); MoI CR (2015) *Analýza současného stavu personálních procesů ve správních úřadech*; MoI CR (2012) *Problémová analýza Smart Administration*; MoI CR (2011) *Analýza aktuálního stavu veřejné správy*; MoI CR (2007) *Efektivní veřejná správa a přátelské veřejné služby.*
[364] We have taken into consideration mainly materials on the cross-sectional agenda: OG CR (2016) *Závěrečná sebehodnotící správa Akčního plánu ČR „Partnerství pro otevřené vládnutí" na období let 2014–2016;* OG CR (2016) *Akční plán pro vyrovnané zastoupení žen a mužů v rozhodovacích pozicích na léta 2016–2018;* OG CR (2015) *Státní politika vůči NNO na léta 2015–2020*; MFA CR (2015) *Koncepce zahraniční politiky ČR*; MFA CR (2015)

database is very heterogeneous as are the systematic procedures. The identified problems also reflect the diversity of expectations set for public administrations. However, some elements are often repeated and in different contexts. These include prevalent resortism and a lack of horizontal coordination, a weak emphasis on the long-term perspective, room for improvement in terms of transparency as well as in the circulation of information within the public administration, questionable quality of public policies (or, in the strict sense, of the regulatory public policy), insufficient emphasis on the recipients of public policies (or clients of public administration services), public administration issues in the area of human resources and the problem of corruption.[366] In terms of sustainable development, attention needs to be paid to all of these issues, but particular attention should be focused on two of them:

Major issues - coherence of public policies

1034. Firstly, the vertical nature of the functioning of the public administration - although it has its merits - leads logically to focus on the objectives of its sections, and less on the overall policy objectives. This is best reflected in cross-sectional policies (e.g. social inclusion, gender agenda, regional policy, etc.). However, it can also be seen in insufficient or only formal considerations of the impact of a certain policy on an area other than the area of primary interest (e.g. territorial, environmental, gender or social impact of economic policy, etc.). This format of public administration reduces the overall cohesion of public policies; various institutions sometimes form and implement completely contradictory policies. This is not just about policies within the Czech Republic, but also at an EU and global level. Higher levels of government, in addition to lower levels, often simply act as "gear levers". In particular, they expect standardised procedures and fulfilled prescribed internal indicators, but often have little to do with the needs of those for whom the public policy is being created. The lower levels adapt to these expectations.

Major issues - a long-term perspective and a strategic approach

1035. The second problem is that operational activities dominate strategic activities. However, many changes considered crucial for sustainable development take effect slowly and decisions about them have long-term consequences. For strategic thinking and decision-making, the public administration has insufficient capacity (personnel, professional, financial) or is unable to use the capacity efficiently. Strategic capacity is also reduced by the pressure from political representatives who rather expect

Bezpečnostní strategie České republiky; OG CR (2014) *Vládní strategie pro rovnost žen a mužů v ČR na léta 2014–2020*; MLSA CR (2014) *Strategie sociálního začleňování*; OG CR (2014) *Vládní koncepce boje s korupcí na léta 2015–2017*; OG CR (2014) *Akční plán ČR „Partnerství pro otevřené vládnutí" na období let 2014–2016*; OG CR (2013) *Strategie působení ČR v EU*; MRD CR (2013) *Strategie regionálního rozvoje ČR 2014-2020;* MF CR AND ERNST & YOUNG (2011) *Metodika přípravy veřejných strategií*.

[365] NEKOLA, M.; KOHOUTEK, J. (2016) Policy work at the sub-national level. *Canadian Public Administration* 59(2); KOHOUTEK, J; NEKOLA M. (2015) Managing policy work matters. *Paper for the 2nd ICPP 2015*; VESELÝ, A. (2013) Accountability in Central and Eastern Europe. *International Review of Administrative Sciences* 79(2).

[366] In many cases, this is not a specifically Czech problem, as illustrated by the thematic comparison with OECD documents, especially the OECD *Public Governance Reviews* series (since 2010). However, direct comparisons are not available because the Czech Republic did not provide the OECD with the relevant data concerning a number of problems.

the public administration to focus on the short-term consequences of decisions.

Public policy is also constituted by legislative bodies

1036. It would be wrong to associate the problems just with executive power. Other actors, from political parties to legislative bodies, are also involved in public policymaking. In particular, the Chamber of Deputies of the Parliament of the Czech Republic has a great influence in this respect; its legislative initiative is comparable to the government legislative initiative which has been adopted over a number of years.[367]

Public policies are also decided by courts

1037. The implementation of public policies is not only a matter of executive power, but also of judicial power which, in a number of areas, is involved in the practical implementation of public policies (such as many public registers) and addresses a number of debatable issues that arise in the implementation of policies. At the same time, the judiciary also performs a more general function of supporting citizens in defending their rights.

The Czech Republic does not start with a solution from scratch

1038. Effort is needed to solve problems. The State Service Act was adopted and implemented, which should stabilise government performance at the central level and provide scope for long-term activities.[368] A system forming strategic materials of public administration[369] was created, and a strategic framework for the development of public administration was prepared.[370] Since 2007, or more specifically since 2011, Regulatory Impact Assessment (RIA) has been included as a formal component of the legislative process at the governmental level.[371] However, it does not concern proposals that come directly from the legislative bodies and does not concern most governmental materials that are not legislative in nature.[372] The amendments to the PSP CR's Rules of Procedure helped mitigate some of the problems associated with the amendments. There is

[367] Since 1996, the proportion of government and non-governmental legislative initiatives has changed, over a number of years the government proportion has been between 50 % and 60 % of all proposals. The vast majority of non-governmental proposals are proposals made by the PSP CR, both from opposition and government MPs. The source is PSP CR data, the percentage data are our own.
[368] *Zákon č. 234/2014 Sb., o státní službě, ve znění pozdějších předpisů.*
[369] MF CR (2012) *Metodika přípravy veřejných strategií*. A database managed by MRD for working with strategic materials from local to international level has been created, see MRD CR; National Network of Healthy Cities (NSZM). *Databáze strategií – portál strategických dokumentů v ČR* [online]. The relevant methods were formed not only for the state administration, but also for the level of regions and municipalities, see ASOCIACE KRAJŮ (2014) *Metodika strategického řízení a plánování krajů ČR;* MRD CR (2014) *Metodika tvorby Programu rozvoje obce* a *Elektronická metodická podpora rozvojových dokumentů obcí*.
[370] MoI CR (2016) *Strategický rámec rozvoje veřejné správy ČR pro období 2014–2020* (updated version, original version is from 2014).
[371] OG CR (2011, resp. 2016) *Obecné zásady hodnocení dopadů regulace* (RIA); OG CR (2016) *Metodika pro měření celkových nákladů na plnění povinností vyplývajících z regulace* and other methods. Should the submitter consider it relevant, the evaluation also includes an assessment of impact on public budgets, international competitiveness, the business environment, spatial units of local administration, social impacts, impact on the consumer, on the environment, gender equality, performance of the state statistical service, corruption risk and on national security and defence. For more details on the use of RIA in OECD countries, see OECD (2015) *OECD Regulatory Policy Outlook 2015*.
[372] Annual reports provide sources of data (for the years 2012–2013 RIA Committee annual reports, from 2014 included in the annual reports Legislativní rady vlády); for the latest data see OG CR (2016) *Výroční zpráva Legislativní rady vlády za rok 2015*.

an Environmental Impact Assessment (SEA) system.[373] There are also other attempts to assess changes in terms of territory development (TIA), although they are still experimental in nature.[374] Similar tools are also available which focus on the impact of decisions on public health (HIA)[375] or on gender equality.[376] Progress has been made in combating corruption. The anti-discrimination law influences the impartiality of public administration.[377] The openness of governance is supported by the Act on the Register of Contracts[378], the Public Procurement Act[379], and the amendment to the Access to Information Act.[380] Within the *e-Government* project, the government works on *e-Legislative* and *e-Collection* projects.[381] There is a National Open Data Catalog[382] and a system of basic registers[383] connected to the CZECH Point network of contact points and a data box system. In the European context, digitalisation of public administration is slow[384], but there is a strategy for the further development of *e-Government*[385], and the government is also working on creating a national architectural plan for public administration and on sectoral electronisation (e.g. justice), etc. The judiciary has improved over the last decade in terms of the average procedure length, but the improvement is not continuous and significant regional inequalities persist.[386] Strategic material that would formulate a long-term vision of justice as a whole has not yet been approved, but it is being prepared and there is already a

[373] *Zákon č. 100/2001 Sb., o posuzování vlivu na životní prostředí a změně některých souvisejících zákonů, ve znění pozdějších předpisů.* Information systems for environmental impact assessment (SEA for concepts and strategies, EIA for constructions, activities and technologies) are managed by the Ministry of the Environment of the Czech Republic, CENIA.

[374] FEŘTOVÁ, M.; ŠPAČKOVÁ, P.; OUŘEDNÍČEK, M.; HÁNA, D.; JÍCHOVÁ, J. (2015) *Metodika hodnocení vývoje území s využitím přístupu Territorial Impact Assessment.*

[375] MH CR (2014) *Zdraví 2020*; KUČEROVÁ, J.; HAVEL, B. (2014) *Návod pro posuzování koncepcí z hlediska hodnocení vlivu na zdraví a v návaznosti na Zdraví 2020 (popřípadě na regionální zdravotní politiku)*.

[376] OG CR (2014) *Vládní strategie pro rovnost žen a mužů v ČR na léta 2014-2020*; OG CR (2015) *Metodika hodnocení dopadů na rovnost žen a mužů pro materiály předkládané vládě ČR*.

[377] *Zákon č. 198/2009 Sb., o rovném zacházení a o právních prostředcích ochrany před diskriminací a o změně některých zákonů.*

[378] *Zákon č. 340/2015 Sb., o zvláštních podmínkách účinnosti některých smluv, uveřejňování těchto smluv a o registru smluv, ve znění pozdějších předpisů.* The register of contracts is administered by the MI.

[379] *Zákon č. 134/2016 Sb., o zadávání veřejných zakázek, ve znění pozdějších předpisů.* The Portal on Public Contracts and Concessions is managed by the MRD.

[380] *Zákon č. 222/2015 Sb., kterým se mění zákon č. 106/1999 Sb., o svobodném přístupu k informacím, ve znění pozdějších předpisů.*

[381] *Zákon č. 222/2016 Sb., o Sbírce zákonů a mezinárodních smluv a o tvorbě právních předpisů vyhlašovaných ve Sbírce zákonů a mezinárodních smluv (zákon o Sbírce zákonů a mezinárodních smluv) ve znění pozdějších předpisů.*

[382] *Zákon č. 298/2016 Sb., kterým se mění některé zákony v souvislosti s přijetím zákona o službách vytvářejících důvěru pro elektronické transakce; zákon č. 106/1999 Sb., o svobodném přístupu k informacím, ve znění pozdějších předpisů*, and *zákon č. 121/2000 Sb., o právu autorském, o právech souvisejících s právem autorským a o změně některých zákonů (autorský zákon), ve znění pozdějších předpisů*; MoI CR (2015) *Standardy publikace a katalogizace otevřených dat VS ČR*.

[383] *Zákon č. 111/2009 Sb., o základních registrech, ve znění pozdějších předpisů.* Registers are managed by the Base Registry Administrator.

[384] EC (2016) *Digital Economy and Society Index 2016 Country Profile Czech Republic*.

[385] MoI CR (2015) *Strategie rozvoje ICT služeb veřejné správy a její opatření na zefektivnění ICT služeb*.

[386] MJ CR upon personal request.

conceptual tool for a good criminal policy.[387] Although the identified problems persist, they are being resolved over various time frames.

The Czech Republic is yet to progress with some of the changes

1039. However, the public administration or the political representation itself have not captured, or captured only partially, some of the changes that have been made in the consideration of public policymaking and the functioning of the public administration after 2000 and, to a greater extent, after 2010.[388] We could collectively call it a problem with conceptual innovations. These are the following changes:

New perspectives - constructivism and evidence-based policymaking

1040. Firstly, the emergence of constructivist approaches appearing in the area of public policymaking and implementation. Constructivists point out that neither problems nor their solutions are objective, but they are always associated with a certain context of values, concepts and theories. This, among other things, determines the basis for the practical need to involve different actors in the process of public policymaking and implementation and to find common ideas in the discussion.[389] The need for participation, resulting from the effort for a democratic establishment, thus meets the need for inclusion necessary for long-term efficiency. We strive to find ways to cope with value diversity in everyday practice of public administration (*metagovernance*, *transgovernment*).[390] Constructivism also casts a different light on an approach that has been expanding since the late 1990s, and today constructivism is now firmly rooted in mainstream in the reference countries - *evidence-based policy*. That describes a public policy that is developed using the techniques common in the scientific environment, whether it concerns forms (data collection and evaluation, rigorous methods) or is directly linked to scientific knowledge. Evidence-based policy is now approached less strictly. There is awareness of its value system and there are various forms of its supplementation or modification.[391]

New perspectives - from NPM to synthesis

1041. Secondly – in the sphere of public administration, in the narrower sense, there has been a rise and retreat of *New Public Management* (NPM). NPM transmits management logic, concepts and tools in the market and private business to the functioning of public administration. Partly in response to NPM, approaches which have emerged following the spread of

[387] MJ CR (2016) *Koncepce vězeňství do roku 2025*.
[388] For reflection of these changes across the EU, see EC (2015) *Quality of Public Administration;* and OECD (2015) *Government at a Glance 2015*.
[389] E.g. WAGENAAR, H. (2015) *Meaning in Action*; FISCHER, F. (2009) *Democracy and Expertise*; FISCHER, F. (2003) *Reframing Public Policy*; HAJER, M.; WAGENAAR, H. (ed.) (2003) *Deliberative Policy Analysis*, on the functioning of public administration, see BEVIR, M.; RHODES, R. (2006) *Governance Stories*.
[390] MEULEMAN, L. (ed.) (2013) *Transgovernance*; MEULEMAN, L. (2008) *Public Management and the Metagovernance of Hierarchies, Networks and Markets.* Participation and deliberation may again play crucial roles here, see e.g. GASTIL, J.; KNOBLOCH, K.; KAHAN, D.; BRAMAN, D. (2016) Participatory Policymaking Across Cultural Cognitive Divides. *Public Administration* 94(4).
[391] E.g. CAIRNEY, P. (2016) *The Politics of Evidence-based policymaking*; HEAD, B. (2015) Toward more "evidence-informed" Policymaking? *Public Administration Review* 76(3); complements or modifications by EU and OECD, e.g. EK (2016) *Behavioral Insights Applied to Policy*; OECD (2015) *Achieving Public Sector Agility at Times of Fiscal Consolidation*.

information technologies (*digital-era governance*)[392] and new communication methods emerged at the turn of the century.[393] The results of the application of NPM and other procedures are mixed. Some things have proven successful, although today's framing of issues and ideas about the possibilities of certain tools differs greatly from the framing and visions of their origins (e.g. RIA, *Total Quality Management*, performance measurement, decision-making autonomy and e-*Government*). However, many procedures, especially from the NPM category, either failed, or solved the original problems creating new, often equally serious, problems at the same time.[394] Since the beginning of the new century, synthesising approaches have therefore begun to emerge.[395]

New perspectives - systemic thinking and innovation

1042. Thirdly – systemic thinking has started to be promoted in the area of public service provision.[396] It is based on the finding that the public administration is finding it hard to cope with change in general, especially with the increasing individualisation of citizens' needs. Public services are mainly planned with a linear logic with functional specialisation. People are categorised according to individual needs related to the average life cycle (birth, common illness, short-term unemployment, etc.). Depending on these categories, they are entitled to certain services. The services are provided by different providers, specialising in one service or one service segment. This is undoubtedly useful; such a specialist-based system is able to meet needs well. However, the linear approach is not suited to solving problems which have a number of different causes, without identifying one primary cause that can be easily removed or compensated. These causes are often very specific. In fact, there are many such complex problems. The result is phenomena such as long-term unemployment, homelessness, or the poverty trap. This is also apparent in the Czech Republic, for example, in the long-term existence of groups of people trapped in poverty or at permanent serious risk of poverty or in the absolute numbers of the long-term unemployed. It can also be expected that the needs of the population will continue to change and individualise due to trends such as population ageing, robotisation/automation of various fields,

[392] MARGETTS, H.; DUNLEAVY, P. (2013) The second wave of digital-era governance. *Philosophical Transaction of The Royal Society;* DUNLEAVY, P; MARGETTS, H.; BASTOW, S.; TINKLER, J. (2008) *Digital Era governance;* DUNLEAVY, P; MARGETTS, H., BASTOW, S.; TINKLER, J. (2005) New public management is dead. *Journal of Public Administration Research and Theory* 16(3).

[393] For the latest approaches from this category, see LEES-MARSHMENT, J. (2015) *The Ministry of Public Input*.

[394] For a summary overview of the changes, see POLLITT, CH; BOUCKAERT, G. (2011) *Public Management Reform;* VAN DER MEER, F; RAADSCHLDERS, J.; TOONEN, T. (2015) *Comparative Civil Service Systems in the 21st Century*; HOOD, C; DIXON, R. (2015) *A Government that Worked Better and Cost Less?* HOOD, C. (2011) *The Blame Game*. NPM was also critically reconsidered by OECD, see OECD (2011) *Building on Basic*; OECD (2010) *Public Administration after "New Public Management"*.

[395] BOHNE, E.; GRAHAM, J; RAADSCHELDERS, J; LEHRKE, J. (2014) *Public Administration and the Modern State;* TORFING, J.; GUY PETERS, B.; PIERRE, J.; SØRENSEN, E. (2012) *Interactive Governance*. BOURGON, J. (2011) *A New Synthesis of Public Administration*; OSBORNE, S. (2006) New Public Governance? *Public Management Review* 8(3).

[396] MITCHELL, F; MITSCHELL CH. (2016) *Adaptive administration*; ZOKAEI, E.; SEDDON, J.; O´DONOVAN, B. (eds.) (2011) *Systems Thinking*; SEDDON, J. (2008*) Systems Thinking in the Public Sector*.

and career flexibility (see Key Areas Economic Model and People and Society). Therefore, the solution is designed to increase personnel or financial capacities of the public administration, as well as the well-developed "tailored public services".[397]

New perspectives - resilience and adaptability

1043. Fourthly – from the field of study of social-ecological systems, the concept of *resilience* has entered the public administration arena, bringing the idea of adaptation, and the idea of the social origin of a number of risks and social resources to minimise them.[398] Resilience is most often associated with the ability to respond to sudden changes and unexpected events, and it has found its most typical application in the focus on crisis management capacity and on the so-called critical infrastructure. However, this concept has not yet been covered and it goes beyond the original security framework. The philosophy behind the resilience category is a more general approach to responding to change or to cope with uncertainty. As such, it is also critically reflected.[399] There is also no reason to associate the concept with the systemic theory which existed at the birth of the concept. Philosophy in the category of resilience is rather a stimulus to gradual innovation in the public sector, or more specifically of social innovation in the broad sense of the word.[400]

What the Czech Republic thinks - conceptual lagging

1044. In spite of these developments, the public administration in the Czech Republic still focuses mainly on approaches from the NPM category in its strategic visions in a format similar to that taken at the beginning of their implementation in the reference countries. It often happens involuntarily, without any evident connection to the NPM stream. Selectively, the public administration focuses on some of the elements of other approaches, most often related to the development of information technology (*digital-era governance* in the form of *e-Government*). With the *evidence-based policy*, the Czech public administration does not work systematically, it is only present in the embryonic form in the RIA process and not yet used in practice, and its restrictions have yet to be taken into

[397] For a practical application example, see SEDDON, J. (Vanguard Consulting) (2014) *Saving money by doing the right thing*; MIDDLETON, P. (ed.) (2010) *Delivering Public Services That Work, Vol. 1;* PELL, C. (ed.) (2012) *Delivering Public Services That Work, Vol. 2.* For the situation in the Czech Republic, see HORÁK, P.; HORÁKOVÁ, M. (2009) Role liniových pracovníků ve veřejné politice. *Sociologický časopis* 45 (2); HORÁK, P. Implementation of the Czech activation policy at the local level and the individualisation principle, in SIROVÁTKA, T.; WINKLER, J.; ŽIŽLAVSKÝ, M. (ed.) (2009) *Nejistoty na trhu práce.* For overview of various approaches to individualization, cf. VAN BERKEL, R., VALKENBURG, B. (ed.) (2007) *Making It Personal* and VAN BERKEL, R.; DE GRAAF, D.; SIROVÁTKA, T. (ed.) (2011) *The Governance of Active Welfare State in Europe*.

[398] For current approach, see BIGGS, R; SCHLÜTER, R; SCHOON, M. (ed.) (2015) *Principles for Building Resilience*; TIERNEY, K. (2014) *Social Roots of Risk*; BOIN, A.; VAN EETEN, J. (2013) The Resilient Organization. *Public Management Review* 15(3); BOYD, E.; FOLKE, C. (ed.) (2011) *Adapting Institutions.*

[399] E.g. CHANDLER, D. (2014) Beyond neoliberalism. *Resilience* 2(1); JOSEPH, J. (2013) Resilience as embedded neoliberalism. *Resilience* 1(1).

[400] DUIT, A. (2016) Resilience Thinking. *Public Administration* 94 (2)*;* ANSELL, CH.; TORFING, J. (ed.) (2014) *Public Innovation Through Collaboration and Design;* ANSELL, CH. (2011) *Pragmatist Democracy.*

account. Seddonian system thinking is considered exceptional.[401] The concept of resilience is adopted in the Czech Republic, but it is still associated with various forms of reaction to crisis situations of a natural and anthropogenic nature. It therefore represents an undeniably positive extension of the classic concept of security, but it rarely exceeds the actual security framework itself.[402] In general, the Czech public administration lacks a deeper knowledge of current foreign trends, the ability to think about the origins of one's own work and the awareness to what extent different concrete processes are linked to different value contexts. This leads, and in the future may lead, to another conceptual lag. At the same time, this increases the risk of mechanically taking measures from other contexts. The public administration is exposed to many contradictory demands arising from incompatible approaches and traditions. However, there is a lack of consideration in *metagovernmental* categories that would help the public administration to cope with this multiplicity.

What about the Czech Republic - the problem of trust and the fear of innovation

1045. The problem is compounded by the persistent media-political pressure that the public administration as a whole is exposed to, and the lower level of trust the public has in it,[403] combined with increasingly detailed definitions of procedural practices that accompany some otherwise praiseworthy intentions. The logical solution is, from a public administration employee's point of view, to escape into formalism and to dispense with the responsibility for any solution as much as possible.[404] As a result of all the above phenomena, the low level of public sector innovation is not only evident in comparison with the reference countries but also in comparison with the Visegrad countries.[405] Innovation, not only procedural

[401] MRD CR (2015) *Průvodce procesní evaluací* and experiments with its use at the MRD and MLSA, some innovative projects within the OPE.
[402] MFA CR (2015) *Bezpečnostní strategie České republiky*; NSA (2015) *Národní strategie kybernetické bezpečnosti České republiky na období let 2015 až 2020*; MoI CR AND CZFBRC (2013) *Koncepce ochrany obyvatelstva do roku 2020 s výhledem do roku 2030.* The same activities sometimes occur without being explicitly associated with resilience, e.g. MoI CR AND CZFBRC (2015) *Analýza hrozeb pro Českou republiku* and consecutive documents, primarily MoI CR AND CZFBRC (2016) *Metodický pokyn pro zpracování typových plánů*. The strategy of MH CR (2014) *Zdraví 2020* went beyond the framework of security and direction towards reactive operations. In the narrower sense of the term, the area of security is adequately addressed by the existing strategic approaches (particularly the aforementioned *Bezpečnostní strategie* a MoD CR (2015*) Dlouhodobý výhled pro obranu 2030)*.
[403] SOBIECH, R. (2012) *Image and Attractivity of Central Government Administrations*; similarly VIGODA-GADOT, E., SHOHAM, A., VASHDI, D. (2010) Bridging bureaucracy and democracy in Europe. *European Union Politics* 11(2). However, trust is a reciprocal relationship, and the role of the public administration trust in citizens, and mutual trust between public administrations, see VIGODA-GADOT, E.; ZALMANOVITCH, Y.; BELONOGOV, A. (2012) Public Servants' Trust in Citizens, *Public Organization Review* 12(4) and OOMSELS, P.; Bouckaert, G. (2014) Studying Interorganizational Trust in Public Administration. *Public Performance & Management Review* 37(4).
[404] VESELÝ, A. (2012) Institucionalizace neodpovědnosti, efektivity, nebo konformity? Reformy organizací veřejných služeb v teorii akontability. *Sociologický časopis* 48(4).
[405] EC (2013) *European Public Sector Innovation Scoreboard 2013*; TECHNOPOLIS (2012) *Trends and Challenges in Public Sector Innovation in Europe*. The Czech Republic has no record in the OPSI database, see OECD. Observatory of Public Sector Innovation. *OECD* [online]. In the competition European Public Sector Awards (the competition started in 2007 and takes place every two years), there was only a single application from the Czech Republic in 2015, see EIPA. Best practice and overall results. *EPSA 2015* [online]; previous

(administrative, technological), but also innovation in services, management style and conceptual innovation[406] - is, without exaggeration, the alpha and omega of long-term sustainable governance.

6.3 Better way to create and implement public policies

Better way to create and implement public policies

1046. The Czech Republic should learn from the reference countries' journey both in the area of democratic governance and in the area of long-term efficiency of governance. Learning does not mean copying. On the contrary, in many cases it means that a certain procedure should be avoided. Assessed from the perspective of sustainable development and on the basis of identified problems, it is advisable that the Czech Republic sets the overall goal of a better way of formulating and implementing public policies, from policy development and policy formulation through decision-making to policy implementation and evaluation.

rounds of the competition look similar. For summary of innovation experience from OECD countries, see OECD (2015) *The Innovation Imperative in the Public Sector*.

[406] For summary DE VRIES, H.; BEKKERS, V.; TUMMERS, L. (2016) Innovation in the Public Sector. *Public Administration* 94(1); ANTTIROIKO, A-V.; BAILEY, S.; VALKAMA, P. (2011) *Innovations in Public governance*; výstupy evropského projektu LIPSE (Learning from Innovation in Public Sector Environments, 2013-2016).

7 External context of the Czech Republic development

1047. We cannot think about the long-term development of the Czech Republic without considering the forces and trends that influence our country's development but also are beyond our control at the same time. This strategic document is therefore based on the concept of Global Megatrends (GMT).[407] These are global trends which we expect to see in the future which may significantly affect the ability to meet the development goals set by the *Czech Republic 2030*[408].

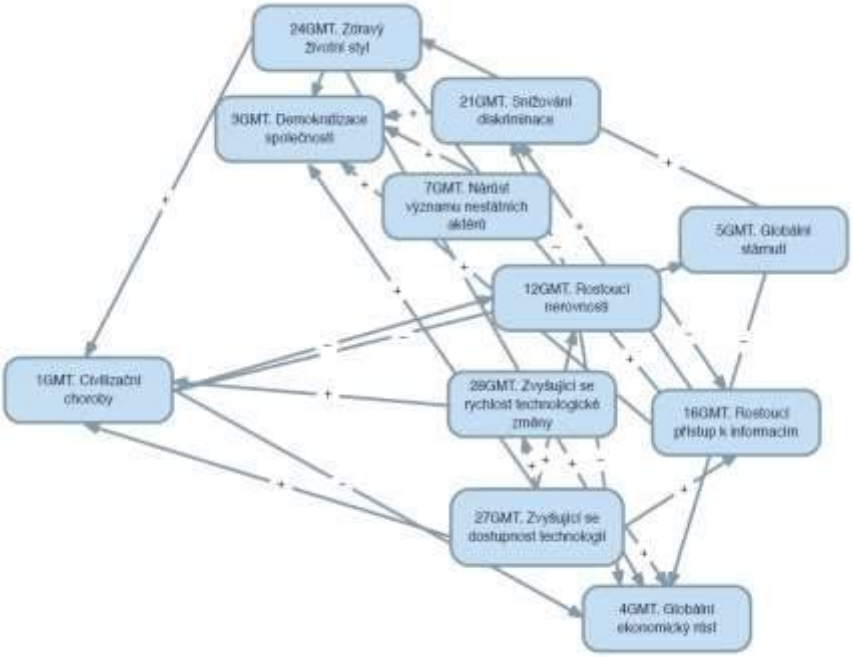
1048. As part of the preparation of the *Czech Republic 2030*, each of the key areas were assigned such megatrends considered relevant, and then the likely impact of these megatrends on strategic goals was evaluated with the help of a network of experts. The impact level of megatrends may be different within each area, although they interact with each other and each megatrend is at least partially influenced by all other megatrends. The interactions of megatrends and their impact on key areas was evaluated over the period of 15 to 35 years.

1049. The cross-interaction method is used to detect and analyse complex dependencies among many variables. For this reason, the method is suitable for predicting future events. It allows the analysis of relationships and interactions of variables, e.g. in the form of model maps.[409] Expert testimonials have produced multiparametric model maps that visualise three indicators.

1050. In the event of a change in the conditions of one GMT in a near-homogeneous group, it may be assumed that the nearer GMT will be affected relatively sooner than those groups considered less similar. Therefore, the so-called indirect effect was also investigated. Links depicted in the form of model maps point to the fact that GMT must be seen as a variable acting on several other GMTs simultaneously. Parameters provided by experts serve to clarify their mutual interaction.[410]

[407] In the framework of the study *Global Megatrends study for the updated Strategic Framework for Sustainable Development: a list of global megatrends* prepared for the Office of Government by the Technology Centre of the Academy of Sciences of the Czech Republic and the Centre for Environmental Affairs at the Charles University in October 2015, a list of all global megatrends was compiled. HAVRÁNEK, M.; POKORNÝ, O. (2016) *Globální megatrendy pro aktualizovaný Strategický rámec udržitelného rozvoje.*
[408] Ibid., pp. 4–5.
[409] DUNN, W. N. (2016) *Public Policy Analysis,* pp. 176.
[410] MILES, I.; SARITAS, O.; SOKOLOV, A. (2016) *Foresight for Science, Technology and Innovation*, pp. 189.

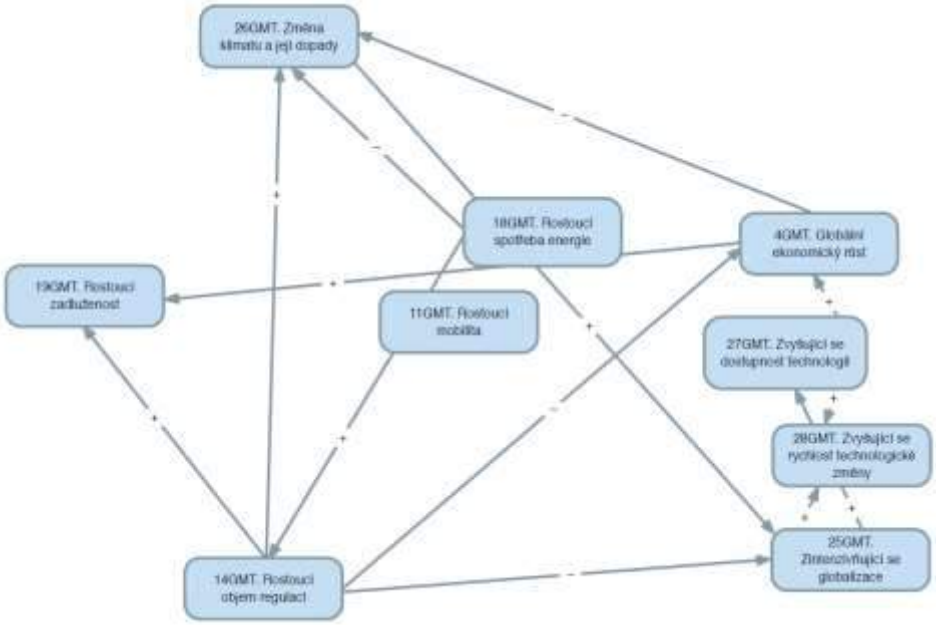
1051. In the key area *People and Society* is significantly influenced by 11 GMTs, such as Increasing access to information, Rising technological change rates, Reducing discrimination, Company democratisation, Increasing accessibility of technology, Healthy lifestyle, Increasing the importance of non-state actors, Global economic growth, Global ageing, Rising inequalities and Lifestyle diseases.[411]



1052. The consequences of the above-mentioned megatrends and their interaction have been taken into account in the formulation of the strategic objectives of the key area *People and society* and their elaboration into specific objectives.[412]

[411] SOCIOTRENDY (2016) *Zhodnocení vazeb mezi vybranými globálními megatrendy a jejich vlivu na vybrané klíčové oblasti rozvoje České republiky do roku 2030*, pp. 18–24.
[412] Ibid., pp. 44–45.

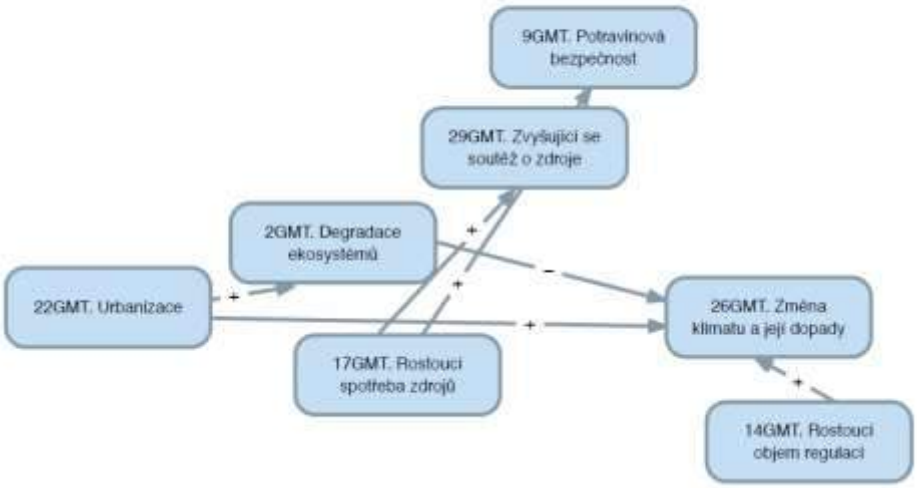
1053. The key area *Economic Model* is significantly influenced by GMT Increasing accessibility of technologies, Increasing speed of technological change, Enhanced globalisation, Global economic growth, Rising energy consumption, Rising debt, Increasing mobility, Growing volume of regulation, and Climate change.[413]



1054. The consequences of the above-mentioned megatrends and their interaction have been taken into account in the formulation of the strategic objectives of the key area *Economic model* and their elaboration into specific objectives.[414]

[413] Ibid., pp. 25–29.
[414] Ibid., pp. 44–45.

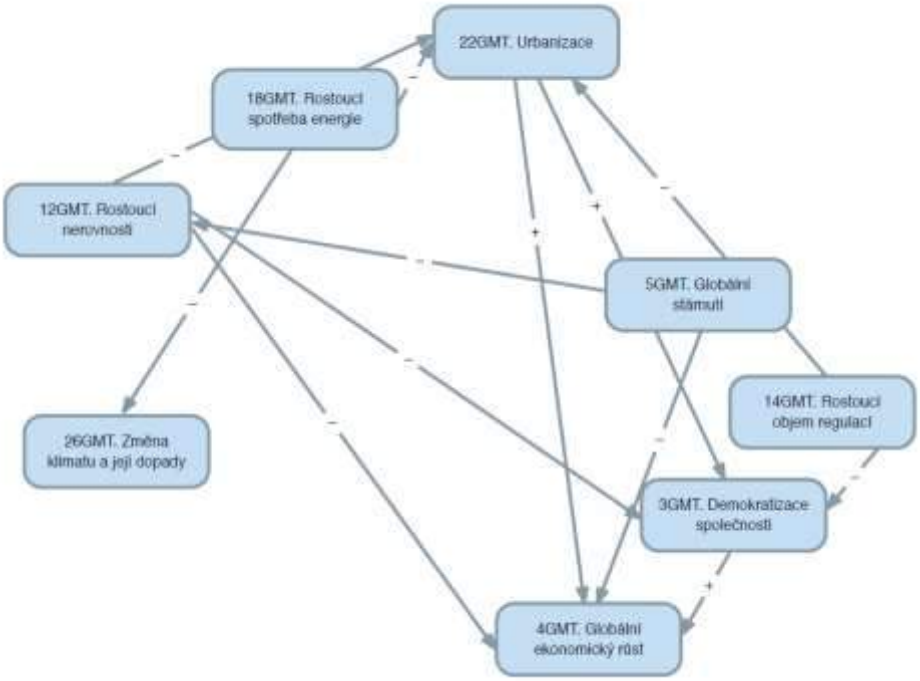
1055. The key area *Resilient Ecosystems* is significantly influenced by GMT Urbanisation, Food safety, Increasing regulatory volume, Rising consumption of resources, Increasing competition for resources, Climate change and its impact, and Degradation of ecosystems.[415]



1056. The consequences of the above-mentioned megatrends and their interaction have been taken into account in the formulation of the strategic objectives of the key area *Resilient ecosystems* and their elaboration into specific objectives.[416]

[415] Ibid., pp. 29–30.
[416] Ibid., pp. 45–46.

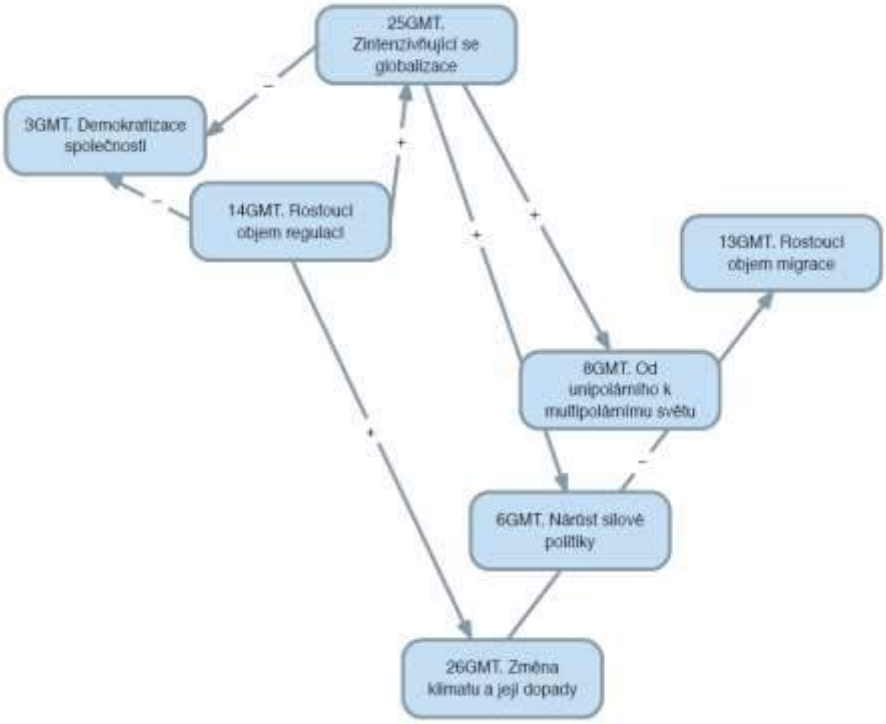
1057. The key area *Municipalities and Regions* is significantly influenced by GMT Urbanisation, Company democratisation, Global economic growth, Global ageing, Growing volume of regulation, Rising power consumption, Increasing inequalities, and Climate change and its impact.[417]



1058. The consequences of the above-mentioned megatrends and their interaction have been taken into account in the formulation of the strategic objectives of the key area *Municipalities and regions* and their elaboration into specific objectives.[418]

[417] Ibid., pp. 31–34.
[418] Ibid., pp. 47–49.

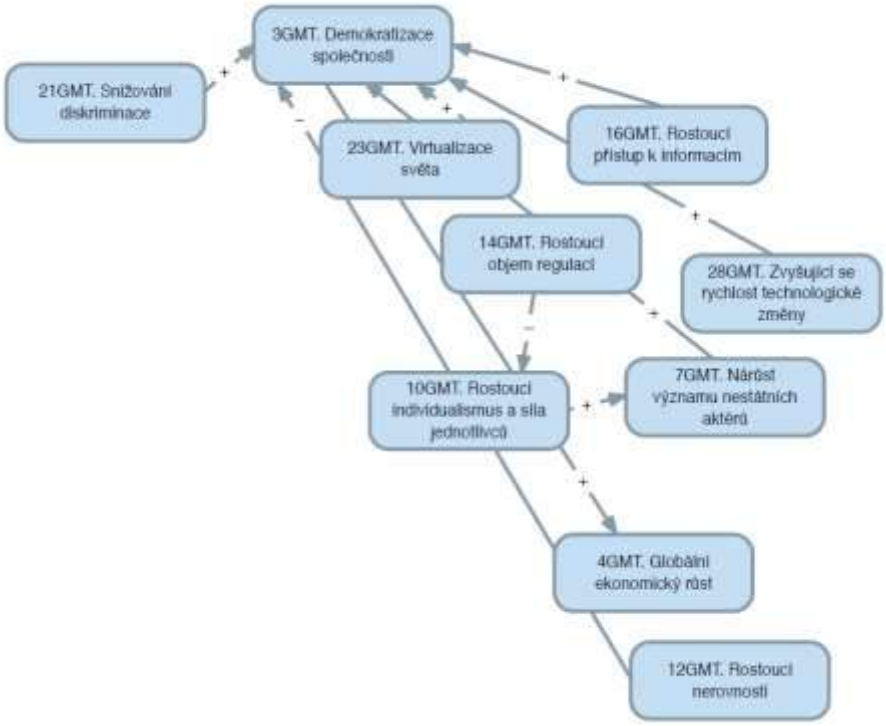
1059. The key area *Global Development* is significantly influenced by GMT From the Unipolar to the multipolar world, Intensifying globalisation, Society democratisation, Growing volume of migration, Increasing regulatory volume, Enhancing power policy, and Climate change.[419]



1060. The consequences of the above-mentioned megatrends and their interaction have been taken into account in the formulation of the strategic objectives of the key area *Global development* and their elaboration into specific objectives.[420]

[419] Ibid., pp. 35–37.
[420] Ibid., pp. 48–49.

1061. In terms of sustainable development, the key area *Good Governance* is influenced significantly by GMT Reducing discrimination, Democratisation of society, Increasing the importance of non-state actors, Growing access to information, Growing individualism and strength of individuals, Increasing speed of technological change, Virtualisation of the world, Global economic growth, and Increase in inequalities.[421]



1062. The consequences of the above-mentioned megatrends and their interaction have been taken into account in the formulation of the strategic objectives of the key area *Good governance* and their elaboration into specific objectives.[422]

[421] Ibid., pp. 38–41.
[422] Ibid., pp. 50–51.

Bibliography

ACEMOGLU, D.; AUTOR, D. (2010) *Skills, Tasks and Technologies. Implications for employment and earning.* National Bureau of Economic Research. Dostupné z: http://www.nber.org/papers/w16082.pdf.

ADAMS, R. B.; FERREIRA, D. (2004) Women in the Boardroom and their impact on governance and performance. *Journal of Financial Economics* 94, s. 291–309.

ADLER, R. D. (2001) *Women in the Executive Suite Correlate to High Profits.* Glass ceiling Research Center. Dostupné z: http://glass-ceiling.com/InTheNewsFolder/HBRArticlePrintablePage.html.

ADSERÀ, A. (2005) Vanishing Children: From high Unemployment to Low Fertility in Developed Countries. *American Economic Review Papers and Proceedings*. 95(2), s.198–193.

ADSERÀ, A.; BOIX, C.; GUZI, M.; PYTLIKOVA, M. (2016): *Unstable Political Regimes and Wars as Drivers of International Migration.* [Unpublished manuscript presented at EALE conference in Ghent and EEA-ESEM congress in Geneva, 2016].

ADSERÀ, A.; PYTLIKOVÁ, M. (2015): The Role of Language in Shaping International Migration. *Economic Journal* 125(586), s. F49–F81.

ADSERÀ, A.; PYTLIKOVÁ, M. (2016) Language and Migration. In GINSBURG, V.; WEBER, O. (eds) *The Palgrave Handbook of Economics and Language.* Houndmills, Basingstoke: Palgrave Macmillan.

AGHION, P. (2012) *From growth theory to growth policy design.* Institute for Government, LSE Growth Commission. Dostupné z: http://www.lse.ac.uk/researchAndExpertise/units/growthCommission/documents/pdf/Aghion_GrowthDoc_Apr2012.pdf.

AGORA CE. *Participativní rozpočet* [online]. Dostupné z: http://participativnirozpocet.cz/.

ALESINA, A.; LA FERRARA, E. (2005) Ethnic diversity and economic performance. *Journal of Economic Literature* 43(3), s 762–800.

ANSELL, C. (2011) *Pragmatist Democracy: Evolutionary Learning as Public Philosophy*. Oxford: Oxford University Press.

ANSELL, CH.; TORFING, J. (ed.) (2014) *Public Innovation Through Collaboration and Design.* London, New York: Routledge.

ANTTIROIKO, A.-V.; BAILEY, S.; VALKAMA, P. (2011) *Innovations in Public governance*. Amsterdam, Berlin, Tokyo, Washington, D. C.: IOS Press.

AOPK ČR (AGENTURA OCHRANY PŘÍRODY A KRAJINY ČR) (2009) *Příroda a krajina České republiky. Zpráva o stavu 2009.* Dostupné z: http://www.mzp.cz/C1257458002F0DC7/cz/news_091130_zpravaostavu/$FILE/zprava%20o%20stavu2009.pdf.

AOPK ČR (AGENTURA OCHRANY PŘÍRODY A KRAJINY ČR); EVERNIA S.R.O.; VÚKOZ (VÝZKUMNÝ ÚSTAV SILVA TAROUCY PRO KRAJINU A OKRASNÉ ZAHRADNICTVÍ, V. V. I.) (2010)

Vyhodnocení migrační propustnosti krajiny pro velké savce a návrh ochranných a optimalizačních opatření. [Projekt VaV SP/2d4/36/08]. Dostupné z: http://www.ochranaprirody.cz/druhova-ochrana/migracni-koridory/.

ARMINGEON, K.; SCHÄDEL, L. (2015) Social Inequality in Political Participation: The Dark Sides of Individualisation. *West European Politics*, 38(1), s. 1–27.

ARONSSON, G. (2005) Health and development opportunities for those in fixed-term employment. In GUSTAFSSON, R.; LUNDBERG, I. (eds.) *Worklife and Health in Sweden 2004*. Stockholm: National Institute for Working Life, s. 225–248.

ASOCIACE KRAJŮ (2014) *Metodika strategického řízení a plánování krajů ČR*.

ASPEN INSTITUT PRAGUE (2016) *Česko: Jak jsme na tom? 10. 11. 2016*. Dostupné z: http://www.aspeninstitutece.org/images_upload/files/Cesko2016/Cesko2016_studie_final.pdf .

BANG, H. (2010) Everyday Makers and Expert Citizens: Active Participants in the Search for a New Governance, in FENWICK, J; MCMILLAN, J. (ed.) (2010) *Public Management in the Postmodern Era: Challenges and Prospects.* Cheltenham UK, Northhampton USA, s. 163–192.

BARTON, J.; PRETTY, J. (2010) What is the best dose of nature and green exercise for improving mental health? a multi-study analysis. *Environmental Science & Technology* 44*, s. 3947–3955.*

BASIC INCOME EARTH NETWORK. *BIEN/Basic Income Earth Network* [online]. Dostupné z: http://www.basicincome.org/.

BERLIANT, M.; FUJITA, M. (2011) The dynamics of knowledge diversity and economic growth. *Southern Economic Journal* 77, s. 856–884.

BERTELSMANN STIFTUNG (2016) *Sustainable Governance Index* 2016.

BEVIR, M.; RHODES, R. (2006) *Governance Stories*. London, New York: Routledge.

BIČÁKOVÁ, A.; KALÍŠKOVÁ, K. (2015) *Od mateřství k nezaměstnanosti: Postavení žen s malými dětmi na trhu práce.* IDEA studie 8-2015.

BIGGS, R.; SCHLÜTER, R.; SCHOON, M. (ed.) (2015) *Principles for Building Resilience: Sustaining Ecosystem Services in Social-Ecological Systems*. Cambridge: Cambridge University Press.

BIS (Bezpečnostní informační služba) (2012) *Výroční zpráva Bezpečnostní informační služby za rok 2011.* Dostupné z: https://www.bis.cz/vyrocni-zpravac2ed.html?ArticleID=26.

BIS (Bezpečnostní informační služba) (2013) *Výroční zpráva Bezpečnostní informační služby za rok 2012.* Dostupné z: https://www.bis.cz/vyrocni-zprava015d.html?ArticleID=25.

BIS (Bezpečnostní informační služba) (2016) *Výroční zpráva Bezpečnostní informační služby za rok 2015.* Dostupné z: https://www.bis.cz/vyrocni-zprava890a.html?ArticleID=1104.

BOHNE, E.; GRAHAM, J.; RAADSCHELDERS, J.; LEHRKE, J. (2014) *Public Administration and the Modern State: Assessing Trends and Impact*. Houndmills, Basingstoke: Palgrave Macmillan.

BOIN, A.; VAN EETEN, J. (2013) The Resilient Organization. *Public Management Review* 15(3), s. 429–445.

BORJAS, G. J. (2003) The labor demand curve is downward sloping: Reexamining the impact of immigration on the labor market. *Quarterly Journal of Economics*, 118(4), 1335–1374.

BOURGON, J. (2011) *A New Synthesis of Public Administration: Serving in the 21st Century*. Kingston, Ont.: McGill – Queen´s University Press.

BOYD, E.; FOLKE, C. (ed.) (2011) *Adapting Institutions: governance, complexity and social-ecological resilience*. Cambridge: Cambridge University Press.

BRATMAN, G. N.; DAILY, G. C.; LEVY, B. J.; GROSS, J. J. (2015) The benefits of nature experience: improved affect and cognition. *Landscape and Urban Planning 138*, s. 41–50.

BRAUN, D.; HUTTER, S. (2016) Political trust, extra-representional participation and the openess of political systems. *International Political Science Review* 37(2).

CAIRNEY, P. (2016) *The Politics of Evidence-based policy Making.* Houndmills, Basingstoke: Palgrave Macmillan.

CARD, D. (1990) The Impact of the Mariel Boatlift on the Miami Labor Market. *Industrial and Labor Relations Review*, 43(2).

CATTANEO, C.; FIORIO, C.; PERI, G. (2015) What Happens to the Careers of European Workers When Immigrants "Take Their Jobs“? *Journal of Human Resources* 50(3), s. 655-693.

CENIA (2015) *Portál MA21.* Dostupné z: http://ma21.cenia.cz/DatabázeMA21prohlížení/Statistiky/základnístatistikykMA21/tabid/759/language/cs-CZ/Default.aspx.

CENIA; MŽP ČR (MINISTERSTVO ŽIVOTNÍHO PROSTŘEDÍ ČR) (2015) *Zpráva o životním prostředí ČR 2014*. Dostupné z: http://www.mzp.cz/C1257458002F0DC7/cz/zpravy_o_stavu_zivotniho_prostredi_publikace/$FILE/SOPSZP-ZPRAVA_ZPCR_2014-20160201.pdf.

CPS (Committee for Political Sociology – International Sociological Association), *Members and Activists of Political Parties.* [Working group.] Dostupné z: http://www.projectmapp.eu/databases/.

CRIVELLI, E.; DE MOOIJ, R.; KEEN, M. (2015) *Base Erosion, Profit Shifting and Developing Countries*. [IMF Working Paper 15/118]. Dostupné z: https://www.imf.org/external/pubs/ft/wp/2015/wp15118.pdf.

CVVM (CENTRUM PRO VÝZKUM VEŘEJNÉHO MÍNĚNÍ) (2015) *Výzkum Naše společnost, v 15-09, Názory veřejnosti na důvody vstupu do politické strany*. Dostupné z: http://cvvm.soc.cas.cz/en/media/com_form2content/documents/c1/a7205/f3/pv151002b.pdf.

CVVM (CENTRUM PRO VÝZKUM VEŘEJNÉHO MÍNĚNÍ) (2016) *Výzkum Naše společnost, v 16-02, Angažovanost občanů a zájem o politiku*. Dostupné z: http://cvvm.soc.cas.cz/media/com_form2content/documents/c1/a7535/f3/pd160330.pdf.

CVVM (CENTRUM PRO VÝZKUM VEŘEJNÉHO MÍNĚNÍ) (2016) *Výzkum Naše společnost, v 16-02, Názor na nedemokratické alternativy politického systému.* Dostupné z: http://cvvm.soc.cas.cz/media/com_form2content/documents/c1/a7529/f3/pd160324.pdf.

CVVM (CENTRUM PRO VÝZKUM VEŘEJNÉHO MÍNĚNÍ) (2016) *Výzkum Naše společnost, v 16-02, Názory občanů na fungování demokracie a lidská práva v ČR*. Dostupné z: http://cvvm.soc.cas.cz/en/media/com_form2content/documents/c1/a7294/f3/pd160318.pdf.

CVVM (CENTRUM PRO VÝZKUM VEŘEJNÉHO MÍNĚNÍ) (2016) *Výzkum Naše společnost, v 16-02, Zájem politiků o občany a možnosti občanů ovlivnit veřejnou sféru*. Dostupné z: http://cvvm.soc.cas.cz/en/media/com_form2content/documents/c1/a7295/f3/pd160322.pdf.

CVVM (CENTRUM PRO VÝZKUM VEŘEJNÉHO MÍNĚNÍ) (2016) *Výzkum Naše společnost, 16-03, Vliv na politické rozhodování*. Dostupné z: http://cvvm.soc.cas.cz/media/com_form2content/documents/c1/a7539/f3/pd160408.pdf.

CVVM (CENTRUM PRO VÝZKUM VEŘEJNÉHO MÍNĚNÍ) (2016) *Výzkum Naše společnost, 16-04, Spokojenost s životem*. Dostupné z: http://cvvm.soc.cas.cz/vztahy-a-zivotni-postoje/spokojenost-s-zivotem-duben-2016.

CVVM (CENTRUM PRO VÝZKUM VEŘEJNÉHO MÍNĚNÍ) (2016) *Výzkum Naše společnost, v 16-09, Postoje obyvatel České republiky k politickým stranám*. Dostupné z: http://cvvm.soc.cas.cz/media/com_form2content/documents/c1/a7611/f3/pv161107a.pdf.

ČERMÁK, D.; VOBECKÁ, J. A KOL. (2011) *Spolupráce, partnerství a participace v místní veřejné správě: význam, praxe, příslib*. Praha: SLON.

ČERNOCH, F.; OSIČKA, J.; ACH-HÜBNER, R.; DANČÁK, B. (2015) *Energiewende: current state, future development and the consequences for the Czech republic.* Brno: Masaryk university.

ČÍŽEK, L.; KONVIČKA, M.; BENEŠ, J.; FRIC, Z. (2009) Zpráva o stavu země: Odhmyzeno. Jak se daří nejpočetnější skupině obyvatel České republiky? *Vesmír 88,* červen 2009, s. 386–389.

ČLOVĚK V TÍSNI (2006) *Transformation: The Czech Experience.* Praha: Člověk v tísni s podporou MZV.

ČNB (ČESKÁ NÁRODNÍ BANKA). Databáze ARAD. *ČNB* [online]. Dostupné z: http://www.cnb.cz/docs/ARADY/HTML/index.htm.

ČSSZ (ČESKÁ SPRÁVA SOCIÁLNÍHO ZABEZPEČENÍ) (2015) Vyplácené invalidní důchody ve stavu k 21. 12. 2015. *Česká správa sociálního zabezpečení* [online]. Dostupné z: http://www.cssz.cz/cz/o-cssz/informace/statistiky/duchodova-statistika/vyplacene-invalidni-duchody-v-cr-dle-skupin-diagnoz/vyplacene-invalidni-duchody-v-cr-dle-skupin-diagnoz.htm.

ČSÚ (2004) *Šetření ENERGO 2004.* Dostupné z: https://www.czso.cz/csu/czso/vysledky-z-roku-2004.

ČSÚ (2009) *Tisková zpráva Postavení venkova v krajích ČR.* [1. prosince 2009] Dostupné z: https://www.czso.cz/csu/czso/postaveni_venkova_v_krajich_cr.

ČSÚ (2013) *Projekce obyvatelstva České republiky (Projekce 2013).* Dostupné z: https://www.czso.cz/csu/czso/projekce-obyvatelstva-ceske-republiky-do-roku-2100-n-fu4s64b8h4.

ČSÚ (2013) *Zaostřeno na ženy a muže – 2013*. [Genderové statistiky] Dostupné z: https://www.czso.cz/csu/czso/1413-13-r_2013-13.

ČSÚ (2014) *Demografická ročenka ČR 2014.* H14 Zahraniční stěhování podle státního občanství, pohlaví a věkových skupin – přistěhovalí. [online]. Dostupné z: https://www.czso.cz/csu/czso/demograficka-rocenka-ceske-republiky-2014.

ČSÚ (2014) *Dojížďka do zaměstnání a do škol podle Sčítání lidu, domů a bytů 2011. Dojížďkové proudy.* [CD]

ČSÚ (2014) *Národnostní struktura obyvatel,* 30. 6. 2014. Dostupné z: https://www.czso.cz/documents/10180/20551765/170223-14.pdf.

ČSÚ (2014) T14 *Cizinci podle kategorií pobytu, pohlaví a občanství k 31. 12. 2013*. Dostupné z: https://www.czso.cz/documents/11292/27914491/1312_c01t14.pdf/17c97f0e-03e1-4a81-84e0-02695b9a637b?version=1.0.

ČSÚ (2014) *Účty materiálových toků (vybrané indikátory) 2014.* Dostupné z: https://www.czso.cz/csu/czso/ucty-materialovych-toku-vybrane-indikatory-2014.

ČSÚ (2014) *Životní pohoda českých obyvatel*. Dostupné z: https://www.czso.cz/csu/czso/cri/zivotni-pohoda-ceskych-obyvatel-2013-9o3rqgacqy.

ČSÚ (2015) *Demografická příručka – 2014*. Dostupné z: https://www.czso.cz/csu/czso/demograficka-prirucka-2014.

ČSÚ (2015) *Malý lexikon obcí České republiky 2015*. Dostupné z: https://www.czso.cz/csu/czso/maly-lexikon-obci-ceske-republiky-2015.

ČSÚ (2015) *Pohyb obyvatelstva – 2014*. Dostupné z: https://www.czso.cz/csu/czso/cri/pohyb-obyvatelstva-4-ctvrtleti-2014-jvieeamvff.

ČSÚ (2015) *Příjmy a životní podmínky domácností - 2014*. Dostupné z: https://www.czso.cz/csu/czso/prijmy-a-zivotni-podminky-domacnosti-2014.

ČSÚ (2016) *ČR v mezinárodním srovnání*. Dostupné z: https://www.czso.cz/csu/czso/ceska-republika-v-mezinarodnim-srovnani.

ČSÚ (2016) *Inovační aktivity podniků v ČR 2012-2014*. Dostupné z: https://www.czso.cz/csu/czso/inovacni-aktivity-podniku-v-cr-2012-az-2014.

ČSÚ (2016) *Produkce, využití a odstranění odpadů - 2015.* Dostupné z: https://www.czso.cz/csu/czso/produkce-vyuziti-a-odstraneni-odpadu-2015.

ČSÚ (2016) *Trh práce v ČR – časové řady – 1993–2015.* Dostupné z: https://www.czso.cz/csu/czso/403r-k-mira-nezamestnanosti-dle-vekovych-skupin-a-vzdelani-r2otx8yu4p.

ČSÚ (2016) *Ukazatele výzkumu a vývoje za rok 2015*. Dostupné z: https://www.czso.cz/csu/czso/ukazatele-vyzkumu-a-vyvoje-2015.

ČSÚ (2016) *Volby.cz.* [online]. Dostupné z: www.volby.cz.

ČSÚ (2016) *Vývoj obyvatelstva České republiky – 2015.* Dostupné z: https://www.czso.cz/csu/czso/vyvoj-obyvatelstva-ceske-republiky.

ČSÚ (2016) *Zaostřeno na ženy a muže – 2016.* [Genderové statistiky] Dostupné z: https://www.czso.cz/csu/gender/2-gender_uvod.

ČSÚ a NIPOS (2016) *Výsledky účtu kultury ČR za rok 2014*. Praha. Dostupné z: https://www.czso.cz/csu/czso/vysledky-uctu-kultury-2014.

ČSÚ. Databáze národních účtů. *ČSÚ* [online]. Dostupné z: http://apl.czso.cz/pll/rocenka/rocenka.indexnu.

ČŠI (ČESKÁ ŠKOLNÍ INSPEKCE) (2013) *Hlavní zjištění PISA 2012: matematická gramotnost patnáctiletých žáků*.

ČŠI (ČESKÁ ŠKOLNÍ INSPEKCE) (2014) *Mezinárodní šetření PISA 2012: národní zpráva. Schopnost patnáctiletých žáků řešit problémy*.

ČÚZK (ČESKÝ ÚŘAD ZEMĚMĚŘICKÝ A KATASTRÁLNÍ) (2016) *Souhrnné přehledy o půdním fondu z údajů katastru nemovitostí ČR 2009-2015*.

DABLA-NORRIS, E.; KOCHHAR, K.; SUPHAPHIPHAT, N.; RICKA, F.; TSOUNTA, E. (2015) *Causes and Consequences of Income Inequality: A global perspective.* [IMF Staff Discussion Note]. Dostupné z: https://www.imf.org/external/pubs/ft/sdn/2015/sdn1513.pdf.

DANIŠ, P. (2016) *Děti venku v přírodě: ohrožený druh?* Tereza. Dostupné z: http://jdeteven.cz/_files/userfiles/Publikace/Deti_venku_v_prirode_2016_web.pdf.

DE VRIES, H.; BEKKERS, V.; TUMMERS, L. (2016) Innovation in the Public Sector: A Systematic Review and Future Research Agenda. *Public Administration* 94(1), s. 146–166.

DEL VICARIO, M.; BESSI, A.; ZOLLO, F.; PETRONI, F.; SCALA, A.; CALDERELLI G.; STANLEY, H. E.; QUATTROCIOCCHI, W. (2016) The spreading of misinformation online. *Proceedings of the National Academy of Sciences* 113(3), s. 554–559. Dostupné z: http://www.pnas.org/lookup/doi/10.1073/pnas.1517441113.

DELLA PORTA, D. (2013) *Can Democracy Be Saved? Participation, Deliberation and Social Movements.* Cambridge UK, Malden USA: Polity Press.

DRAHOKOUPIL, J.; FABO, B. (2016). *The platform economy and the disruption of the employment relationship. ETUI Policy Brief: European Economic, Employment and Social Policy 5/2016*. Dostupné z: https://www.etui.org/Publications2/Policy-Briefs/European-Economic-Employment-and-Social-Policy/The-platform-economy-and-the-disruption-of-the-employment-relationship.

DRYZEK, J. (2006) *Deliberative Global Politics: Discourse and Democracy in Divided World*. Cambridge UK, Malden USA: Polity Press.

DUBSKÁ, D.; ZEMAN, J. (2015) *Analýza vývoje indikátorů nerovnosti v ČR a jejich dopad na růstový potenciál ČR*. Dostupné z: http://www.vlada.cz/assets/ppov/udrzitelny-rozvoj/CR-2030/dubska-Analyza-defin-vc-priloh-C-opraveno_def_2016_11_24.pdf.

DUIT, A. (2016) Resilience Thinking: lessons for public administration. *Public Administration* 94(2), s. 364–380.

DUNLEAVY, P.; MARGETTS, H.; BASTOW, S.; TINKLER, J. (2005) New public management is dead: long live digital-era governance. *Journal of Public Administration Research and Theory* 16(3), s. 467–494.

DUNLEAVY, P; MARGETTS, H.; BASTOW, S.; TINKLER, J. (ed.) (2008) *Digital Era governance: IT corporations, the state and the e-government.* 2. edition. Oxford: Oxford University Press.

DUNN, W. N. (2016) *Public Policy Analysis: An Introduction.* 5. edition. New York: Routledge.

DURDÍK, P. (2013) Vlastnická práva a územní plánování. *Moderní obec* [online]. Dostupné z: http://moderniobec.cz/vlastnicka-prava-a-uzemni-planovani/.

DUŠEK, L.; BARTŮŇKOVÁ, M.; MUŽÍK, J. (2016) *Personální kapacity lékařů v rezortu zdravotnictví – predikce potřeb.* Analýza stavu k 31. 12. 2015 a predikce vývoje do roku 2025–2040. [NZIS ČR, Institut biostatistiky a analýz Masarykovy university.] Dostupné z: http://www.mzcr.cz/dokumenty/spoluprace-ministerstev-zdravotnictvi-a-skolstvi-s-dekany-lekarskych-fakult-stab_12643_3438_1.html.

DUTTA, S.; LANVIN, B.; WUNSCH-VINCENT, S. (ed.) (2016) *The Global Innovation Index 2016.*

EEA (EUROPEAN ENVIRONMENT AGENCY) (2013) *Environment and human health*. [Joint EEA-JRC report.]. Dostupné z: http://www.eea.europa.eu/publications/environment-and-human-health.

EEA (EUROPEAN ENVIRONMENT AGENCY) (2015) *European environment — state and outlook 2015: assessment of global megatrends.* Dostupné z: http://www.eea.europa.eu/soer-2015/global/action-download-pdf.

EIGE (EUROPEAN INSTITUTE FOR GENDER EQUALITY) (2015) *Gender Equality Index 2015: Measuring gender equality in the EU 2005–2012*. Dostupné z: http://eige.europa.eu/sites/default/files/documents/mh0215616enn.pdf.

EIPA (EUROPEAN INSTITUTE OF PUBLIC ADMINISTRATION). Best practices and overall results. *EPSA 2015* [online]. Dostupné z: http://www.epsa2015.eu/files/Full%20list%20of%20EPSA%202015%20Eligible%20Applications_incl.%20submitting%20organisations2%20RevCRO.pdf.

EIU (ECONOMIST INTELLIGENCE UNIT) (2016) *Democracy Index 2015.*

EK (EVROPSKÁ KOMISE) (2009) *Sustainability Report 2009*. Dostupné z: http://ec.europa.eu/economy_finance/publications/pages/publication15998_en.pdf.

EK (EVROPSKÁ KOMISE) (2010) *2020 Energy Strategy*. Dostupné z: https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/2020-energy-strategy.

EK (EVROPSKÁ KOMISE) (2012) *Fiscal Sustainability Report 2012*. Dostupné z: http://ec.europa.eu/economy_finance/publications/european_economy/2012/pdf/ee-2012-8_en.pdf.

EK (EVROPSKÁ KOMISE) (2013) *EU 2013 Report on Policy Coherence for Development*. Dostupné z: https://ec.europa.eu/europeaid/sites/devco/files/pcd-report-2013_en.pdf.

EK (EVROPSKÁ KOMISE) (2013) *European Public Sector Innovation Scoreboard 2013: a pilot exercise*. Dostupné z: http://bookshop.europa.eu/en/european-public-sector-innovation-scoreboard-2013-pbNBAZ13001/.

EK (EVROPSKÁ KOMISE) (2013) *Sustainable development in the European Union: 2013 monitoring report of the EU Sustainable Development Strategy*. Dostupné z: http://ec.europa.eu/eurostat/documents/3217494/6975281/KS-GT-15-001-EN-N.pdf.

EK (EVROPSKÁ KOMISE) (2014) *Komunitně vedený místní rozvoj*. Dostupné z: http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/community_cs.pdf.

EK (EVROPSKÁ KOMISE) (2015) *Gender balance on corporate boards* [Factsheet]. Dostupné z: http://ec.europa.eu/justice/gender-equality/files/womenonboards/factsheet_women_on_boards_web_2015-10_en.pdf.

EK (EVROPSKÁ KOMISE) (2015) *Gender pay gap in the Czech Republic.* Dostupné z: http://ec.europa.eu/justice/gender-equality/files/gender_pay_gap/gpg_country_factsheet_cz_2015_en.pdf.

EK (EVROPSKÁ KOMISE) (2015) *Quality of Public Administration: a Toolbox for Practicioners*. Dostupné z: http://ec.europa.eu/esf/main.jsp?catId=3&langId=en&keywords=&langSel=&pubType=434.

EK (EVROPSKÁ KOMISE) (2015) *Rámec politiky v oblasti klimatu a energetiky v období 2020–2030*. Dostupné z: https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/2030-energy-strategy.

EK (EVROPSKÁ KOMISE) (2015) *Sustainable development in the European Union: 2015 monitoring report of the EU Sustainable Development Strategy.* Dostupné z: http://ec.europa.eu/eurostat/documents/3217494/5760249/KS-02-13-237-EN.PDF.

EK (EVROPSKÁ KOMISE) (2015) *Taxation Trends in the European Union: 2015 edition.* Dostupné z: https://ec.europa.eu/taxation_customs/sites/taxation/files/eco_analysis_report_2015.pdf.

EK (EVROPSKÁ KOMISE) (2016) *Behavioral Insights Applied to Policy: European Report 2016.* Dostupné z: http://publications.jrc.ec.europa.eu/repository/bitstream/JRC100146/kjna27726enn_new.pdf.

EK (EVROPSKÁ KOMISE) (2016) Database AMECO. *European Commission* [online]. Dostupné z: https://ec.europa.eu/info/business-economy-euro/indicators-statistics/economic-databases/macro-economic-database-ameco/ameco-database_en

EK (EVROPSKÁ KOMISE) (2016) *Digital Economy and Society Index 2016 Country Profile Czech Republic*. Dostupné z: https://ec.europa.eu/digital-single-market/en/news/desi-2016-country-profiles.

EK (EVROPSKÁ KOMISE) (2016) *Doporučení pro Doporučení Rady k národnímu programu reforem České republiky na rok 2016 a stanovisko Rady ke konvergenčnímu programu České republiky z roku 2016.* Dostupné z: http://ec.europa.eu/europe2020/pdf/csr2016/csr2016_czech_cs.pdf.

EK (EVROPSKÁ KOMISE) (2016) *Evropský program pro ekonomiku sdílení.* [Sdělení Evropské komise č. 356 Evropskému parlamentu, Radě EU, Evropskému hospodářskému a sociálnímu výboru a Výboru regionů] 2. 6. 2016. Dostupné z: http://ec.europa.eu/DocsRoom/documents/16881.

EK (EVROPSKÁ KOMISE) (2016) *Fiscal Sustainability Report 2015*. Dostupné z: http://ec.europa.eu/economy_finance/publications/eeip/ip018_en.htm.

EK (EVROPSKÁ KOMISE) (2016) *Flesh Eurobarometr 438.* [Report.] The use of collaborative platforms.

EK (EVROPSKÁ KOMISE) (2016) *Review of greening after one year.* Dostupné z: http://ec.europa.eu/agriculture/sites/agriculture/files/direct-support/pdf/2016-staff-working-document-greening_en.pdf.

EK (EVROPSKÁ KOMISE) (2016) *Zpráva o České republice 2016*. Dostupné z: http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index_en.htm.

EK (EVROPSKÁ KOMISE) Innovation Output Indicator. *European Commmission* [online]. Dostupné z https://rio.jrc.ec.europa.eu/en/stats/innovation-output-indicator.

EK (EVROPSKÁ KOMISE) The Innovation Union Scoreboard. *European Commmission* [online]. Dostupné z: http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards/index_en.htm.

ENERGETICKÝ REGULAČNÍ ÚŘAD (2015) *Roční zpráva o provozu ES ČR.* Dostupné z: http://www.eru.cz/documents/10540/462820/Rocni_zprava_provoz_ES_2015.pdf.

EP (EVROPSKÝ PARLAMENT) (2016) *Industry 4.0.* [Study for the ITRE Committee.] Dostupné z: http://www.europarl.europa.eu/RegData/etudes/STUD/2016/570007/IPOL_STU(2016)570007_EN.pdf.

EUROFOUND (2012) *Employment trends and policies for older workers in the recession.* Dostupné z: https://www.eurofound.europa.eu/printpdf/publications/report/2012/labour-market-social-policies/employment-trends-and-policies-for-older-workers-in-the-recession.

EUROFOUND (2014) *Drivers of recent job polarisation and upgrading in Europe: European Jobs Monitor 2014.* Dostupné z: https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1419en.pdf.

EUROFOUND (2015) *Recent developments in temporary employment: Employment growth, wages and transitions.* Dostupné z: http://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1557en.pdf.

EUROFOUND (2016) *6th European Working Conditions Survey: Overview Report*. Dostupné z: https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1634en.pdf.

EUROPEAN AGENCY FOR FUNDAMENTAL RIGHTS; UNITED NATIONS DEVELOPMENT PROGRAMME (2012) *The situation of Roma in 11 EU Member States. Survey results at a glance*. Dostupné z: http://www.equineteurope.org/FRA-UNDP-launch-report-on-the.

EUROSTAT (2013) *At risk of poverty or social exclusion in the EU27.* Dostupné z: http://ec.europa.eu/eurostat/documents/2995521/5162014/3-26022013-AP-EN.PDF/f3037078-2e64-47b6-ba81-514c699975c5. [Tisková zpráva 28/2013 z 26. 2. 2013.]

EUROSTAT (2013) *Quality of life in Europe – facts and views – overall life satisfaction*. Dostupné z: http://ec.europa.eu/eurostat/statistics-explained/index.php/Quality_of_life_in_Europe_-_facts_and_views_-_overall_life_satisfaction.

EUROSTAT (2014) *Living Conditions in Europe: 2014 edition*. Dostupné z: http://ec.europa.eu/eurostat/documents/3217494/6303711/KS-DZ-14-001-EN-N.pdf/d867b24b-da98-427d-bca2-d8bc212ff7a8.

EUROSTAT (2014) *Public Health*. Health expectancy. Healthy Life Years at birth, at age 65. Dostupné z: http://ec.europa.eu/health/dyna/echi/datatool/index.cfm?indlist=40a.

EUROSTAT (2016) Average number of rooms per person by type of household and income group from 2003 – EU-SILC survey. *Eurostat* [online]. Dostupné z: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_lvho04&lang=en.

EUROSTAT (2016) Database Employment and Unemployment. Labour Force Survey. *Eurostat* [online]. Dostupné z: http://ec.europa.eu/eurostat/web/lfs/data/database.

EUROSTAT (2016) Long-term unemployment by sex - annual average*. Eurostat* [online]. Dostupné z: http://ec.europa.eu/eurostat/en/web/products-datasets/-/UNE_LTU_A.

EUROSTAT (2016) *Mortality and life expectancy statistics.* Dostupné z: http://ec.europa.eu/eurostat/statistics-explained/index.php/Mortality_and_life_expectancy_statistics.

EUROSTAT. Table Temporary employees as percentage of the total number of employees. [online] *Eurostat.* Dostupné z: http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tesem110&plugin=1.

EUROSTAT. Dataset Annual enterprise statistics by size class for special aggregates of activities (NACE Rev. 2) [sbs_na_sca_r2]. *Eurostat* [online]. Dostupné z: http://ec.europa.eu/eurostat/web/products-datasets/-/sbs_na_sca_r2.

EUROSTAT. Dataset Greenhouse Gas Emissions (source: EEA) [env_air_gge]. *Eurostat* [online]. Dostupné z: http://ec.europa.eu/eurostat/web/products-datasets/-/env_air_gge.

EUROSTAT. Dataset National Accounts aggregates by industry (up to NACE A*64) [nama_10_a64]. *Eurostat* [online]. Dostupné z: http://ec.europa.eu/eurostat/web/products-datasets/-/nama_10_a64.

EUROSTAT. Dataset Resource productivity [env_ac_rp]. *Eurostat* [online]. Dostupné z: http://ec.europa.eu/eurostat/web/products-datasets/-/env_ac_rp.

EUROSTAT. Dataset Simplified energy balances - annual data [nrg_100a]. *Eurostat* [online]. Dostupné z: http://ec.europa.eu/eurostat/web/products-datasets/-/nrg_100a.

EUROSTAT. Dataset Structure of taxes by economic function [gov_a_tax_str]. *Eurostat* [online]. Dostupné z: http://ec.europa.eu/eurostat/web/products-datasets/-/gov_a_tax_str.

EUROSTAT. Dataset Total intramural R&D expenditure (GERD) by sectors of performance [rd_e_gerdtot]. *Eurostat* [online]. Dostupné z: http://ec.europa.eu/eurostat/web/products-datasets/-/rd_e_gerdtot.

EUROSTAT. Youth unemployment by sex, age and educational attainment level. *Eurostat* [online]. Dostupné z: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=yth_empl_090&lang=en.

EVROPSKÁ UNIE (2016) *Shared Vision, Common Action: a Stronger Europe.* Dostupné z: https://europa.eu/globalstrategy/sites/globalstrategy/files/eugs_review_web.pdf.

FAO (FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS) (2014) *The State of World Fisheries and Aquaculture: Opportunities and Challenges*. Dostupné z: http://www.fao.org/3/a-i3720e.pdf.

FEŘTOVÁ, M.; ŠPAČKOVÁ, P.; OUŘEDNÍČEK, M.; HÁNA, D.; JÍCHOVÁ, J. (2015) *Metodika hodnocení vývoje území s využitím přístupu Territorial Impact Assessment: Hodnocení územních dopadů změn významného zaměstnavatele v regionu.* [Druhá verze.] Praha: Přírovědecká fakulta.

FIALA, D.; FUČÍK, P.; HRUŠKA, J.; ROSENDORF, P.; SIMON, O. (2013) Fosfor v centru pozornosti. In *Vodní hospodářství* 63(8), s. 247–250.

FISHKIN, J. (2009) *When the People Speak: Deliberative Democracy and Public Consultation.* Oxford: Oxford University Press.

FISCHER, F. (2003) *Reframing Public Policy: Discursive Politics and Deliberative Practices.* Oxford: Oxford University Press.

FISCHER, F. (2009) *Democracy and Expertise: Reorienting Policy Inquiry.* Oxford: Oxford University Press.

FOND DALŠÍHO VZDĚLÁVÁNÍ (2015) *Předvídání kvalifikačních potřeb: koncept – metody – data*. [Výstup projektu předvídání kvalifikačních potřeb Překvap.*] Čtvrtá průmyslová revoluce a zaměstnanost*. Dostupné z: https://koopolis.cz/sekce/knihovna/407-prekvap-predvidani-vyvoje-trhu-prace-a-zkvalitnovani-vystupu-tohoto-predvidani.

FOND DALŠÍHO VZDĚLÁVÁNÍ (2015) *Předvídání kvalifikačních potřeb: koncept – metody – data.* [Výstup projektu předvídání kvalifikačních potřeb Překvap.] *Vývoj odvětví. Projekce pracovních míst a zaměstnanosti v ČR do roku 2025 podle odvětví*. Dostupné z: https://koopolis.cz/sekce/knihovna/407-prekvap-predvidani-vyvoje-trhu-prace-a-zkvalitnovani-vystupu-tohoto-predvidani.

FÓRUM 50 %. Zastoupení žen a mužů v politice. *Fórum 50%* [online]. Dostupné z: http://padesatprocent.cz/cz/statistiky/zastoupeni-zen-a-muzu-v-politice.

FRANCOEUR, C.; LABELLE, R.; SINCLAIR-DESGAGNÉ, B. (2008) Gender diversity in corporate governance and top management, *Journal of Business Ethics* (81)1, s. 83-95.

FREY, C. B.; OSBORNE, M. (2013): *The Future of Employment: How Susceptible are Jobs to Computerisation?* Oxford Martin Programme on Technology and Employment. Dostupné z: http://www.oxfordmartin.ox.ac.uk/downloads/academic/future-of-employment.pdf.

FULLER, R. A.; IRVINE, K. N.; DEVINE-WRIGHT, P.; WARREN, P. H.; GASTON, K. J. (2007) Psychological benefits of greenspace increase with biodiversity. *Biology Letters* 3*, s.* 390–394.

GAC (2015) *Analýza sociálně vyloučených lokalit v ČR*, Praha.

GALLEGO, A. (2010) Understanding Unequal Turnout: Education and Voting in Comparative Perspective. *Electoral Studies*, 29(2), s. 239–248.

GASTIL, J.; KNOBLOCH, K.; KAHAN, D.; BRAMAN, D. (2016) Participatory Policymaking Across Cultural Cognitive Divides. *Public Administration* 94(4), s. 970–987.

GGDC (GRONINGEN GROWTH AND DEVELOPMENT CENTRE) (2013) *The Maddison-Project.* Dostupné z: http://www.ggdc.net/maddison/maddison-project/home.htm, verze z roku 2013.

GIEBLER, H.; MERKEL, W. (2016) Freedom and Equality in Democracies. *International Political Science Review* 37(5).

GORINAS, C.; PYTLIKOVÁ, M. (2015) The Influence of Attitudes toward Immigrants on International Migration. *International Migration Review* 49(4), s. 1–36.

GREEN CLIMATE FUND. Resources mobilized. *Green Climate Fund* [online]. Dostupné z: http://www.greenclimate.fund/partners/contributors/resources-mobilized.

GRÖNLUND, K.; BÄCHTIGER, A.; SETÄLÄ, M. (eds.) (2014) *Deliberative Mini-Publics: Involving Citizens in the Democratic Process*. Colchester: ECPR Press

GRÖNLUND, K.; HERNE, K.; SETÄLÄ, M. (2015) Does Enclave Deliberation Polarize Opinions? *Political Behaviour* 37(4), s. 995–1020.

HAHEY, T.; SMYTH, E.; SIRGY, M. J.; RAHTZ, D. (2004) Do subjective indicators measure welfare? Evidence from 33 European societies. *European Societies*. 6(1), s. 61–73.

HAJER, M.; WAGENAAR, H. (ed.) (2003) *Deliberative Policy Analysis: Understanding Governance in the Network Society*. Cambridge: Cambridge University Press.

HAMPL, O.; KOTRBA, V. (2015) *Mapování transferů mezi rodinou a společností zprostředkovaných státem.* [1. část, jednogenerační ukazatele.] Dostupné z: http://www.duchodova-komise.cz/wp-content/uploads/2015/02/O.-Hampl-V.-Kotrba-Mapování-transferů-mezi-rodinou-a-společností-zprostředkovaných-státem-1.-část-jednogenerační-ukazatele-leden-2015.pdf.

HAMPLOVÁ, D. (2006) *Mimomanželská plodnost v České republice po roce 1989.*

HANSON, G.; MCINTOSH, C. (2016) *Is the Medditerranean the new Rio Grande? US and EU immigration pressures in the long run.* UC San Diego Library Digital Collections. NBER Working Paper No. 22622. Dostupné z: http://www.nber.org/papers/w22622.

HANUSCHEK, E. A.; SCHWERDT, G.; WOESSMANN, L.; ZHANG, L. (2015) *General Education, Vocational Education, and Labor-Market Outcomes over the Life-Cycle.* Hoover Economics Institution, Economics Working Paper 15113. Dostupné z: http://www.hoover.org/sites/default/files/research/docs/15113_-_hanushek_schwerdt_woessmann_and_zhang_-_general_education_vocational_education_and_labor-market_outcomes_over_the_life-cycle.pdf.

HAVRÁNEK, M.; POKORNÝ, O. (2016) *Globální megatrendy pro aktualizovaný Strategický rámec udržitelného rozvoje.* Dostupné z: http://www.vlada.cz/assets/ppov/udrzitelny-rozvoj/CR-2030/Prehled-globalnich-megatrendu.pdf.

HEAD, B. (2015) Toward more „evidence-informed“ Policy Making? *Public Administration Review* 76(3), s. 472–484.

HINTERKÖRNER, P. (2013) Veřejný prostor v jezerním městě Aspern. Veřejný prostor, veřejná prostranství: *Sborník z konference AUÚP*.

HIRŠL, J. (2004) Příspěvky českého státu rodinám na náklady spojené s výchovou dětí. *Demografie*. 2004(3). Dostupné z: http://www.duchodova-komise.cz/wp-content/uploads/2014/12/Demografie-3-2004-revue-pro-v%C3%BDzkum-popula%C4%8Dn%C3%ADho-v%C3%BDvoje.pdf.

HLOUŠEK, V. (2012) Věci veřejné: politické podnikání strany typu firmy. *Politologický časopis* 19(4), s. 322–340.

HÖHNE, S.; KUCHAŘOVÁ, V.; PALONCYOVÁ, J. (2016) *Rodiny s dětmi v České republice: Sociodemografická struktura, finanční a materiální podmínky*. Praha: VÚPSV, v. v. i.

HONG, L, PAGE, S. E. (2001) Problem solving by heterogeneous agents. *Journal of Economic Theory* 97(1), s. 123–163.

HONG, L.; PAGE, S. E. (2004) Groups of diverse problem solvers can outperform groups of high-ability problem solvers. *Proceedings of the National Academy of Sciences of the United States of America,* 101(46), s. 123–139.

HOOD, C. (2011) *The Blame Game: spin, bureaucracy and self-preservation in governments*. Princeton: Princeton University Press.

HOOD, C.; DIXON, R. (2015) *A Government that Worked Better and Cost Less?: Evaluating Three Decades of Reform and Change in UK Central Government.* Oxford: Oxford University Press.

HOOGHE, M.; MARIEN, S. (2013) A Comparative Analysis of the Relation between Political Trust and Forms of Political Participation in Europe. *European Societes* 15(1).

HORÁK, P. (2009) Implementace české aktivační politiky na lokální úrovni a princip individualizace. In SIROVÁTKA, T.; WINKLER, J.; ŽIŽLAVSKÝ, M. (ed.) (2009) *Nejistoty na trhu práce*. Praha: SLON, s. 148–179.

HORÁK, P.; HORÁKOVÁ, M. (2009) Role liniových pracovníků ve veřejné politice. *Sociologický časopis* 45(2), s. 369–395.

HRUŠKA, J.; CIENCIALA, E. (eds.) (2001) *Dlouhodobá acidifikace a nutriční degradace lesních půd – limitující faktor současného lesnictví.* Praha: MŽP ČR.

HUNTLEY, B.; GREEN, R. E.; COLLINGHAM Y. C.; WILLIS, S. G. (2007) *Climatic Atlas of European Breeding Birds*. Barcelona: Lynx Edicions.

CHANDLER, D. (2014) Beyond neoliberalism: resilience, the new art of governing complexity. *Resilience* 2(1), s. 47–63.

CHISWICK, B. R. (1999) Are immigrants favourably self-selected? *American Economic Review* 89(2), s. 181-185. CHOMYNOVÁ, P.; CSÉMY, L.; MRAVČÍK, V. (2016) *Evropská školní studie o alkoholu a jiných drogách (ESPAD) 2015.* Úřad vlády České republiky. Dostupné z: http://jzs.cz/wp-content/uploads/2016/10/Evropsk%C3%A1-studie-o-drog%C3%A1ch.pdf.

INTERNATIONAL IDEA (International Institute for Democracy and Electoral Assistence). Gender Quotas Database. *International Institute for Democracy and Electoral Assistence* [online]. Dostupné z: http://www.idea.int/data-tools/data/gender-quotas.

INTERNATIONAL IDEA (International Institute for Democracy and Electoral Assistence) Voter Turnout Database. *International Institute for Democracy and Electoral Assistence* [online]. Dostupné z: http://www.idea.int/data-tools/data/voter-turnout.

IPA (INTER-PARLIAMENTARY UNION). PARLINE Database on national Parliaments. *Inter-parliamentary Union* [online]. Dostupné z: http://www.ipu.org/parline-e/parlinesearch.asp.

IPA (INTER-PARLIAMENTARY UNION). Women in National Parliaments. *Inter-parliamentary Union* [online]. Dostupné z: http://www.ipu.org/wmn-e/classif.htm.

IPR (INSTITUT PLÁNOVÁNÍ A ROZVOJE HLAVNÍHO MĚSTA PRAHY) (2014) *Dojížďka a vyjížďka do zaměstnání do/z hl. m. Prahy: analýza základních charakteristik a vývoje*. Dostupné z: http://www.iprpraha.cz/uploads/assets/dokumenty/ssp/analyzy/Dojizdka%20a%20vyjizdka%20do%20zamestnani%20Praha%202016.pdf.

ISERNIA, P.; FISHKIN, J. (2014) The Euro-polis deliberative poll. *European Union Politics* 15(3), s. 311-327.

JANÍČKO, M. (2015) *Osoby se zdravotním postižením a další profesní vzdělávání: postoje, zkušenosti, bariéry.* Fond dalšího vzdělávání. Dostupné z: https://koopolis.cz/sekce/vyzkumy-a-statistiky/286-vyzkum-kooperace.

JOSEPH, J. (2013) Resilience as embedded neoliberalism: a governmentality approach. *Resilience* 1(1), s. 38-52.

JURAJDA, Š.; MÜNICH, D. (2003) Understanding Czech long-term unemployment. *Finance a úvěr* 53(1-2), s. 11-30.

KAHANEC, M.; ZIMMERMANN, K. F. (eds.) (2010) *EU labor markets after post-enlargement migration.* Berlin: Springer.

KAHNE J.; WESTHEIMER, J. (2006) The Limits of Political Efficacy: Educating Citizens for a Democratic Society. *Political Science & Politics,* 39(2), s. 289–296.

KALWIJ, A. (2010) The impact of family policy expenditure on fertility in western Europe. *Demography,* 47(2), s. 503–519.

KATRŇÁK, T.; SIMONOVÁ, N.; FÓNADOVÁ, L. (2013) Od diferenciace k diverzifikaci: test MMI a EMI v českém středním vzdělávání v první dekádě 21. století. *Sociologický časopis,* 49(4), s. 491–520.

KERN, A.; MARIEN, S.; HOOGHE, M. (2015) Economic Crisis and Levels of Political Participation in Europe (2002–2010) *West European Politics* 38(3), s. 465–490.

KOHOUTEK, J; NEKOLA M. (2015) Managing policy work matters: profiles and styles of managers in the Czech Republic Ministries. *Paper for the 2th ICPP 2015*.

KOSTELECKÝ, T.; MIKEŠOVÁ, R.; POLÁKOVÁ, M.; ČERMÁK, D.; BERNARD, J.; ŠIMON, M. (2015) *Geografie výsledků parlamentních voleb: prostorové vzorce volebního chování v Česku 1992-2013.*

KOUBA, K.; NÁLEPOVÁ, M.; FILIPEC, O. (2013) Proč jsou ženy v české politice podreprezentovány? Analýza kandidátních listin a volebního chování v Olomouckém kraji. *Politologický časopis* 20(4), s. 372–391.

KOUBEK, J. (2010) České sněmovní volby 2010 z hlediska stability a změny stranického systému: blokační aktéři, personalizace, lokalizace a fragmentace. *Politologická revue* 16(1), s. 111–127.

KOUCKÝ, J.; ZELENKA, M. (2013) Kontext a důsledky vzdělávací expanze: Proměny českého školství, úrovně vzdělání, sociálních nerovností, gramotnosti a uplatnění absolventů. In STRAKOVÁ, J.; VESELÝ, A. (eds.) *Předpoklady úspěchu v práci a v životě.* Výsledky mezinárodního výzkumu dospělých OECD/PIAAC.

KROUWEL, A. (2012) *Party Transformation in European Democracies*. *New York*: State University of New York Press, 2012.

KŘÍŽKOVÁ, A.; FORMÁNKOVÁ, L. (2014) *Intersekcionální perspektiva zkoumání dopadů krize na životní dráhy v ČR: gender, třída, věk (a rodičovství*). Gender, rovné příležitosti, výzkum. 15(2), s. 61–76.

KUČEROVÁ, J.; HAVEL, B. (2014) *Návod pro posuzování koncepcí z hlediska hodnocení vlivu na zdraví a v návaznosti na Zdraví 2020.*

KUO, M. (2015) How might contact with nature promote human health? Promising mechanisms and a possible central pathway. *Frontiers in Psychology* 6, s. 1093.

LAZEAR, E. (1999) Globalisation and the market for team-mates. *Economic Journal* 109*,* s. C15–C40.

LEES-MARSHMENT, J. (2015) *The Ministry of Public Input: Integrating Citizens Views into Political Leadership*. Houndmills, Basingstoke: Palgrave Macmillan.

LIBROVÁ, H. (2010) Individualizace v environmentální perspektivě: sociologické rámování mění pohled a plodí otázky. *Sociologický časopis.* 46(1), s. 125–152.

LINEK, L. (2013) Rostoucí sociální nerovnosti ve volební účasti v Česku v letech 1990-2010. *Naše společnost* 11(1), s. 3–14.

LINEK, L. (2015) Účast ve sněmovních volbách v roce 2013: zdroje, mobilizace a motivace. *Evropská volební studia* 10(2).

LONGHI, S.; NIJKAMP, P.; POOT, J. (2008) The impact of immigration on the employment of natives in regional labour markets: a meta-analysis. In POOT, J.; WALDORF, B.; VAN WISSEN, L. (eds.) *Migration and human capital.* Cheltenham: Edward Elgar.

MAIER, K. (1998) Účinnost dosavadních a budoucích nástrojů pro snižování regionálních rozdílů v České republice. In *Urbanismus a územní rozvoj* 1(6), s. 30–34.

MAIER, K. (2009) Polycentric development in the spatial development policy of the Czech Republic, *Urban Research & Practice*, 2(3), s. 319-331.

MAIER, K.; FRANKE, D. (2015) Trendy prostorové sociálně-ekonomické polarizace v Česku 2001-2011. *Sociologický časopis* 51(1), s. 89–123.

MAIR, P. (2013) *Ruling the void: the hollowing-out of western democracy*. London, New York: Verso.

MALLESON, T. (2014) *After Occupy: economic democracy for 21st century*. Oxford: Oxford University Press.

MARGETTS, H.; DUNLEAVY, P. (2013) The second wave of digital-era governance: a quasi-paradigm for government on the Web. *Philosophical Transaction of The Royal Society* 3, s. 1–17.

MARIEN, S.; HOOGHE, M.; QUINTELIER, E. (2010) Inequalities in Non-institutionalized Forms of Political Participation. *Political Studies* 58(1), s. 187–213.

MAŘÍKOVÁ H.; VOHLÍDALOVÁ M. (2011) Nestabilita partnerských soužití: rozpady kohabitací a rozvody manželství. *Socioweb* 11/2011

MAŘÍKOVÁ, H. (ed.); KŘÍŽKOVÁ, A.; VOHLÍDALOVÁ, M. (2012) *Živitelé a živitelky: reflexe (a) praxe.* Praha: SLON.

MATĚJŮ, P.; ANÝŽOVÁ, P.; SIMONOVÁ, N. (2013) Vliv osobnostních, rodinných a sociálních faktorů na dosažené vzdělání a úroveň kompetencí. In STRAKOVÁ, J., VESELÝ, A. (eds.) *Předpoklady úspěchu v práci a v životě.* Výsledky mezinárodního výzkumu dospělých OECD/PIAAC.

MAZÁK, J. (2015) *Osoby ve věku 50–65 a další profesní vzdělávání: postoje, zkušenosti, bariéry.* Fond dalšího vzdělávání. Dostupné z: https://koopolis.cz/sekce/vyzkumy-a-statistiky/286-vyzkum-kooperace.

MD ČR (MINISTERSTVO DOPRAVY ČR); CENTRUM DOPRAVNÍHO VÝZKUMU. Statistiky – cyklostezky. *Cyklodoprava* [online].

MEULEMAN, L. (2008) *Public Management and the Metagovernance of Hierarchies, Networks and Markets: The Feasibility of Designing and Managing Governance Style Combinations.* Heidelberg: Physica-Verlag (Springer).

MEULEMAN, L. (ed.) (2013) *Transgovernance: advancing sustainability governance*. Heidelberg: Springer.

MF ČR (MINISTERSTVO FINANCÍ ČR) (2012) *Metodika přípravy veřejných strategií*.

MF ČR (MINISTERSTVO FINANCÍ ČR) (2016) *Tisková zpráva Ocenění si převzala dvacítka TOP plátců daně z příjmů*. [27. 5. 2016] Dostupné z: http://www.mfcr.cz/cs/aktualne/tiskove-zpravy/2016/oceneni-si-prevzala-dvacitka-top-platcu-25074.

MF ČR (MINISTERSTVO FINANCÍ ČR); ERNST & YOUNG (2011) *Metodika přípravy veřejných strategií: komparativní analýza přípravy veřejných strategií v zahraničí a v ČR*.

MIČKA, P. (ed.) (2016) *Analýza občanské participace v České republice.* Praha: Agora CE. Dostupné z: http://www.paktparticipace.cz/dokumenty/analyza.

MIDDLETON, P. (ed.) (2010) *Delivering Public Services That Work, Vol. 1.* Axminster: Triarchy Press.

MICHAELS, G.; NATRAJ, A.; VAN REENEN, J. (2014) Has ICT Polarized Skill Demand?: Evidence from Eleven Countries over Twenty-Five Years. *Review of Economics and Statistics,* 96(1), s. 60–77.

MILES, I.; SARITAS, O.; SOKOLOV, A. (2016) *Foresight for Science, Technology and Innovation*. Switzerland: Springer, 2016.

MITCHELL, F.; MITSCHELL, CH. (2016) *Adaptive administration: practice strategies for dealing with constant change in public administration and policy.* Boca Raton, London, New York: CRC Press.

MMR ČR (MINISTERSTVO PRO MÍSTNÍ ROZVOJ ČR) (2014) *Metodika tvorby Programu rozvoje obce* a *Elektronická metodická podpora rozvojových dokumentů obcí.* Dostupné z: http://www.mmr.cz/cs/Podpora-regionu-a-cestovni-ruch/Regionalni-politika/Rozvoj-obci/Elektronicka-metodicka-podpora-rozvojovych-dokumen.

MMR ČR (MINISTERSTVO PRO MÍSTNÍ ROZVOJ ČR) (2014) *Strategie regionálního rozvoje ČR 2014–2020.*

MMR ČR (MINISTERSTVO PRO MÍSTNÍ ROZVOJ ČR) (2014) *Výsledky intervencí ze strukturálních fondů a Fondu soudržnosti dosažené v tematických oblastech v letech 2007–2013.*

MMR ČR (MINISTERSTVO PRO MÍSTNÍ ROZVOJ ČR) (2015) *Průvodce procesní evaluací: Toyota Production System for (Public) Service Organisations.*

MMR ČR (MINISTERSTVO PRO MÍSTNÍ ROZVOJ ČR) (2015) *Vybrané údaje o bydlení 2015* [online]. Dostupné z: https://www.mmr.cz/cs/Uzemni-a-bytova-politika/Bytova-politika/Statistiky-Analyzy/Statistiky-z-oblasti-bytove-politiky/Vybrane-udaje-o-bydlen/Vybrane-udaje-o-bydleni-2013-(2).

MMR ČR (MINISTERSTVO PRO MÍSTNÍ ROZVOJ ČR) (2016) [Ústav územního rozvoje, v. v. i.] *Analýza stavu na úseku územního plánování a stavebního řádu*. Dostupné z: http://www.uur.cz/default.asp?ID=4316.

MMR ČR (MINISTERSTVO PRO MÍSTNÍ ROZVOJ ČR) Územní dimenze. *Územní dimenze* [online]. Dostupné z: www.uzemnidimenze.cz.

MMR ČR; NSZM (MINISTERSTVO PRO MÍSTNÍ ROZVOJ ČR; NÁRODNÍ SÍŤ ZDRAVÝCH MĚST). *Databáze strategií – portál strategických dokumentů v ČR* [online]. Dostupné z: https://www.databaze-strategie.cz/.

MO ČR (MINISTERSTVO OBRANY ČR) (2015*) Dlouhodobý výhled pro obranu 2030*.

MOUFFE, C. (2013) *Agonistics: Thinking the World Politically*. London, New York: Verso.

MPO ČR (MINISTERSTVO PRŮMYSLU A OBCHODU ČR) (2015) *Státní energetická koncepce*.

MPSV ČR (MINISTERSTVO PRÁCE A SOCIÁLNÍCH VĚCÍ ČR) (2004) *Národní zpráva o rodině.*

MPSV ČR (MINISTERSTVO PRÁCE A SOCIÁLNÍCH VĚCÍ ČR) (2008) *Národní koncepce podpory rodin s dětmi.*

MPSV ČR (MINISTERSTVO PRÁCE A SOCIÁLNÍCH VĚCÍ ČR) (2013) *Zpráva o rovnosti žen a mužů v roce 2012 v České republice.*

MPSV ČR (MINISTERSTVO PRÁCE A SOCIÁLNÍCH VĚCÍ ČR) (2014) *Strategie sociálního začleňování*.

MPSV ČR (MINISTERSTVO PRÁCE A SOCIÁLNÍCH VĚCÍ ČR) (2016) *Analýza vývoje zaměstnanosti a nezaměstnanosti v roce 2015.*

MPSV ČR (MINISTERSTVO PRÁCE A SOCIÁLNÍCH VĚCÍ ČR) (2016) *Vývoj vybraných ukazatelů životní úrovně v České republice v letech 1993–2015.*

MPSV ČR (MINISTERSTVO PRÁCE A SOCIÁLNÍCH VĚCÍ ČR) (2013) *Koncepce prevence a řešení problematiky bezdomovectví v ČR do roku 2020.*

MPSV ČR (MINISTERSTVO PRÁCE A SOCIÁLNÍCH VĚCÍ ČR) (2013) *Národní strategie rozvoje sociálních služeb pro období 2014–2020*.

MPSV ČR (MINISTERSTVO PRÁCE A SOCIÁLNÍCH VĚCÍ ČR) (2014) *Konsensuální konference o bezdomovectví v České republice. Sborník z konference.*

MPSV ČR (MINISTERSTVO PRÁCE A SOCIÁLNÍCH VĚCÍ ČR) (2015) *Koncepce sociálního bydlení České republiky 2015–2025.*

MPSV ČR (MINISTERSTVO PRÁCE A SOCIÁLNÍCH VĚCÍ ČR) (2015) *Vyhodnocení průzkumu řešení bezdomovectví v obcích s rozšířenou působností.*

MSP ČR (MINISTERSTVO SPRAVEDLNOSTI ČR) (2016) *Koncepce vězeňství do roku 2025.*

MŠMT ČR (MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY ČR) (2016) *Soustavná podpora občanského vzdělávání na školách: pokusné ověřování soustavné podpory občanského vzdělávání na školách*.

MŠMT ČR (MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY ČR) (2014) *Strategie vzdělávací politiky České republiky do roku 2020*.

MŠMT ČR (MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY ČR) (2015) *Analýzy vývoje (ne)zaměstnanosti absolventů středních škol*.

MŠMT ČR (MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY ČR) (2015) *Dlouhodobý záměr vzdělávání a rozvoje vzdělávací soustavy České republiky na období 2015–2020.*

MŠMT ČR (MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY) (2016) *Vývojová ročenka školství 2005/06–2015/16.*

MÜNICH, D.; PERIGNÁTHOVÁ, M.; ZAPLETALOVÁ, L.; SMOLKA, V. (2015) *Platy učitelů českých základních škol: setrvale nízké a neatraktivní.* IDEA studie 4-2015. Praha: Národohospodářský ústav AV ČR.

MURRAY, M. C.; PATEMAN, C. (ed.) (2012) *Basic Income Worldwide: Horizons of Reform.* Houndmills, Basingstoke: Palgrave Macmillan.

MUSIL, J.; MÜLLER, J. (2006) *Vnitřní periferie České republiky, sociální soudržnost a sociální vyloučení*. Praha: CESES FSV UK.

MV ČR (MINISTERSTVO VNITRA ČR) (2004) *Strategie podpory dostupnosti a kvality veřejných služeb.*

MV ČR (MINISTERSTVO VNITRA ČR) (2007) *Efektivní veřejná správa a přátelské veřejné služby: strategie realizace Smart Administration 2007-2015.*

MV ČR (MINISTERSTVO VNITRA ČR) (2009) *Metodika pro zapojování veřejnosti do přípravy vládních dokumentů*.

MV ČR (MINISTERSTVO VNITRA ČR) (2010) *Komplexní strategie ČR k řešení problémů kritické infrastruktury*.

MV ČR (MINISTERSTVO VNITRA ČR) (2010) *Manuál pro zapojování veřejnosti do přípravy vládních dokumentů*.

MV ČR (MINISTERSTVO VNITRA ČR) (2011) *Analýza aktuálního stavu veřejné správy.*

MV ČR (MINISTERSTVO VNITRA ČR) (2012) *Problémová analýza Smart Administration.*

MV ČR (MINISTERSTVO VNITRA ČR) (2014) *Hodnotící zpráva k výsledkům kontrol výkonu přenesené a samostatné působnosti svěřené orgánům obcí, krajů a hlavního města Prahy za léta 2012–2013*.

MV ČR (MINISTERSTVO VNITRA ČR) (2015) *Standardy publikace a katalogizace otevřených dat VS ČR.*

MV ČR (MINISTERSTVO VNITRA ČR) (2015) *Strategie rozvoje ICT služeb veřejné správy a její opatření na zefektivnění ICT služeb.*

MV ČR (MINISTERSTVO VNITRA ČR) (2016) *Analýza měření a hodnocení výkonu veřejné správy v ČR.*

MV ČR (MINISTERSTVO VNITRA ČR) (2016) *Analýza využívání metod kvality ve veřejné správě*.

MV ČR (MINISTERSTVO VNITRA ČR) (2016) *Dopadová ex-post evaluace strategie realizace Smart Administration v období 2007–2015.*

MV ČR (MINISTERSTVO VNITRA ČR) (2016) *Strategický rámec rozvoje veřejné správy ČR pro období 2014–2020.* [Aktualizovaná verze, původní 2014.]

MV ČR (MINISTERSTVO VNITRA ČR) (2016) *Výroční práva o stavu veřejné správy v ČR v roce 2015*.

MV ČR (MINISTERSTVO VNITRA ČR) [SSS – sekce státní služby] (2015) *Analýza současného stavu personálních procesů ve správních úřadech.*

MV ČR (MINISTERSTVO VNITRA ČR) A HASIČSKÝ ZÁCHRANNÝ SBOR (2013) *Koncepce ochrany obyvatelstva do roku 2020 s výhledem do roku 2030*.

MV ČR (MINISTERSTVO VNITRA ČR) A HASIČSKÝ ZÁCHRANNÝ SBOR (2015) *Analýza hrozeb pro Českou republiku*.

MV ČR (MINISTERSTVO VNITRA ČR) Občanské aktivity. *Ministerstvo vnitra České republiky* [online]. Dostupné z: http://www.mvcr.cz/clanek/obcanske-aktivity-118893.aspx.

MV ČR (MINISTERSTVO VNITRA ČR); HASIČSKÝ ZÁCHRANNÝ SBOR (2016) *Metodický pokyn pro zpracování typových plánů.*

MYSÍKOVÁ, M. (2012) Gender Wage Gap in the Czech Republic and Central European Countries. *Prague Economic Papers* 21(3). Praha. Dostupné z: http://www.vse.cz/pep/427.

MZD ČR (MINISTERSTVO ZDRAVOTNICTVÍ ČR) (2014) *Zdraví 2020 – Národní strategie ochrany a podpory zdraví a prevence nemocí.*

MZD ČR (MINISTERSTVO ZDRAVOTNICTVÍ ČR) (2015) *Zpráva o zdraví obyvatel České republiky.* [Zdraví 2020] Dostupné z: http://www.mzcr.cz/verejne/dokumenty/zprava-o-zdravi-obyvatel-ceske-republiky2014-_9420_3016_5.html.

MZE ČR (MINISTERSTVO ZEMĚDĚLSTVÍ ČR) (2015) *Situační a výhledová zpráva Půda 2015.*

MZE ČR (MINISTERSTVO ZEMĚDĚLSTVÍ ČR) (2015) *Zpráva o stavu lesa a lesního hospodářství ČR v roce 2014.* Ministerstvo zemědělství, Praha.

MZE ČR (MINISTERSTVO ZEMĚDĚLSTVÍ ČR) (2016) *Strategie resortu Ministerstva zemědělství ČR s výhledem do roku 2030*.

MZV ČR (MINISTERSTVO ZAHRANIČNÍCH VĚCÍ ČR) (2010) *Koncepce zahraniční rozvojové spolupráce České republiky na období 2010–2017.*

MZV ČR (MINISTERSTVO ZAHRANIČNÍCH VĚCÍ ČR) (2013) *Členství České republiky v mezinárodních organizacích.* [Předkládací zpráva k usnesení Vlády České republiky ze dne 2. května 2013 č. 317].

MZV ČR (MINISTERSTVO ZAHRANIČNÍCH VĚCÍ ČR) (2013) *Strategie mnohostranné rozvojové spolupráce ČR na období 2013–2017.*

MZV ČR (MINISTERSTVO ZAHRANIČNÍCH VĚCÍ ČR) (2013) *Strategie působení ČR v Evropské unii.* Dostupné z: https://www.vlada.cz/assets/media-centrum/aktualne/Strategie-pusobeni-CR-v-EU.pdf.

MZV ČR (MINISTERSTVO ZAHRANIČNÍCH VĚCÍ ČR) (2015) *Bezpečnostní strategie ČR.*

MZV ČR (MINISTERSTVO ZAHRANIČNÍCH VĚCÍ ČR) (2015) *Humanitární pomoc ČR poskytnutá do zahraničí v roce 2015.* Dostupné z: http://www.mzv.cz/jnp/cz/zahranicni_vztahy/rozvojova_spoluprace/humanitarni_pomoc/vyrocni_souhrny_hp/humanitarni_pomoc_cr_poskytnuta_do_2.html.

MZV ČR (MINISTERSTVO ZAHRANIČNÍCH VĚCÍ ČR) (2015) *Informace o zahraniční rozvojové spolupráci České republiky v roce 2015.* Dostupné z: http://www.mzv.cz/jnp/cz/zahranicni_vztahy/rozvojova_spoluprace/koncepce_publikace/vyrocni_prehledy/informace_o_zahranicni_rozvojove_7.html.

MZV ČR (MINISTERSTVO ZAHRANIČNÍCH VĚCÍ ČR) (2015) *Koncepce zahraniční politiky ČR.*

MZV ČR (MINISTERSTVO ZAHRANIČNÍCH VĚCÍ ČR) (2016) *Plán ZRS na rok 2017.* Dostupné z: http://www.mzv.cz/jnp/cz/zahranicni_vztahy/rozvojova_spoluprace/koncepce_publikace/rocni_plany/plan_zrs_cr_na_rok_2017.html.

MŽP ČR (MINISTERSTVO ŽIVOTNÍHO PROSTŘEDÍ ČR) (2010) *Strategický rámec udržitelného rozvoje ČR.*

MŽP ČR (MINISTERSTVO ŽIVOTNÍHO PROSTŘEDÍ ČR) (2012) *Koncepce podpory místní Agendy 21 v ČR do roku 2020*.

MŽP ČR (MINISTERSTVO ŽIVOTNÍHO PROSTŘEDÍ ČR) (2015) *Strategie ochrany biologické rozmanitosti České republiky 2016–2025.*

MŽP ČR (MINISTERSTVO ŽIVOTNÍHO PROSTŘEDÍ ČR) (2015) *Strategie přizpůsobení se změně klimatu v podmínkách ČR.*

MŽP ČR (MINISTERSTVO ŽIVOTNÍHO PROSTŘEDÍ ČR) (2017) *Národní akční plán adaptace na změnu klimatu.*

MŽP ČR (MINISTERSTVO ŽIVOTNÍHO PROSTŘEDÍ ČR). Souvrať. *eAGRI* [online]. http://eagri.cz/public/web/mze/legislativa/pravni-predpisy-mze/tematicky-prehled/101870462.html.

NÁRODNÍ BEZPEČNOSTNÍ ÚŘAD (2015) *Národní strategie kybernetické bezpečnosti České republiky na období let 2015 až 2020.*

NEJVYŠŠÍ SPRÁVNÍ SOUD (2014) *2943/2014 Sb. NSS*. [Nejvyšší správní soud, 1 Aos 2/2013 – 116]

NEKOLA, M.; KOHOUTEK, J. (2016) Policy work at the sub-national level: Analytical styles of Canadian and Czech directors and managers. *Canadian Public Administration* 59(2), s. 289–309.

NIPOS (2016) *Kultura České republiky v číslech: Vybrané údaje ze statistických šetření.* Dostupné z: http://www.nipos-mk.cz/wp-content/uploads/2013/05/Kultura_v_cislech_2016_web.pdf

OECD (2010) *Public Administration after "New Public Management"*. Paris: OECD Publishing.

OECD (2011) *Building on Basics: OECD Value for Money Study, Final Report*. Hand-out. [7th Annual Meeting on Performance and Results] Paris: OECD Publishing.

OECD (2013) *Mezinárodní šetření TALIS 2013*. Dostupné z: http://stats.oecd.org/Index.aspx?datasetcode=talis_2013%20.

OECD (2014) *Women, Government and Policy Making in OECD Countries: Fostering Diversity for Inclusive Growth.* Paris: OECD Publishing.

OECD (2015) *Achieving Public Sector Agility at Times of Fiscal Consolidation*. Paris: OECD Publishing.

OECD (2015) *Government at a Glance 2015*. Paris: OECD Publishing.

OECD (2015) *In it Together: Why Less Inequality Benefits All*. Paris: OECD Publishing.

OECD (2015) *Measuring and Monitoring BEPS, Action 11 – 2015, Final Report*. Paris, OECD Publishing.

OECD (2015) *OECD Regulatory Policy Outlook 2015*. Paris: OECD Publishing.

OECD (2015) *OECD360 Česká republika 2015: Česká republika v mezinárodním srovnání.* Paris: OECD Publishing.

OECD (2015) *The Innovation Imperative in the Public Sector: Setting an Agenda for Action.* Paris: OECD Publishing.

OECD (2016) *Education at a Glance 2016*. Paris: OECD Publishing.

OECD (2016) *Health at a Glance Europe 2016.* Paris: OECD Publishing.

OECD (2016) *Hospodářské přehledy OECD: Česká republika*. *Shrnutí*. Paris: OECD Publishing.

OECD (2016) *OECD Development Co-operation Peer Reviews: Czech Republic 2016.* Paris: OECD Publishing.

OECD (2016) *OECD Economic Surveys Czech Republic 2016.* Paris: OECD Publishing.

OECD (2016) *Regional Well-Being in OECD Countries: Czech Republic*. Dostupné z: http://www.oecd.org/gov/regional-policy/hows-life-country-facts-czech-republic.pdf

OECD *(2016) Regions at a Glance 2016.* Paris: OECD Publishing.

OECD. Gender wage gap. *OECD* [online]. Dostupné z: https://www.oecd.org/gender/data/genderwagegap.htm.

OECD. Observatory of Public Sector Innovation. *OECD* [online]. Dostupné z: https://www.oecd.org/governance/observatory-public-sector-innovation/innovations/#?hf=10&b=0&sl=opsi&s=desc(document_lastmodifieddate)

OECD. Population with tertiary education*. OECD* [online] Dostupné z: https://data.oecd.org/eduatt/population-with-tertiary-education.htm.

OESCH, D.; RODRIGUEZ MENES, J. (2010) Upgrading or polarization? Occupational change in Britain, Germany, Spain and Switzerland, 1990-2008. *Socio-Economic Review* 9(3), s. 503–531.

OOMSELS, P.; BOUCKAERT, G. (2014) Studying Interorganizational Trust in Public Administration: a Conceptual and Analytical Framework for "Administrational Trust". *Public Performance & Management Review* 37(4), s. 577–604*.*

OSBORNE, E. (2000) The deceptively simple economics of workplace diversity, *Journal of Labor Research,* 21(3), s. 463–476.

OSBORNE, S. P. (2006) New Public Governance? *Public Management Review* 8(3), s. 377–387.

OSN (2012) *Resilient People, Resilient Planet: a future worth choosing.* Dostupné z: http://www.un.org/ga/search/view_doc.asp?symbol=A/66/700&Lang=EOSN (2014) *The Road to Dignity by 2030: ending poverty, transforming all lives and protecting the planet.* Dostupné z: http://www.un.org/ga/search/view_doc.asp?symbol=A/69/700&Lang=E

OSN (2015) *Paris Agreement.* Dostupné z: http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf.

OSN (2015) *Sendai Framework for Disaster Risk Reduction 2015–2030.* Dostupné z: http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf.

OSN (2015) *The Addis Ababa Action Agenda of the Third International Conference on Financing for Development.* Dostupné z: http://www.un.org/esa/ffd/ffd3/wp-

content/uploads/sites/2/2015/07/Addis-Ababa-Action-Agenda-Draft-Outcome-Document-7-July-2015.pdf.

OSN (2015) *The Millennium Development Goals Report 2015: Summary*. Dostupné z: http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20Summary%20web_english.pdf.

OSN (2015) *Transforming Our World: The 2030 Agenda for Sustainable Development.* Dostupné z: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

OTTAVIANO, G.; PERI, G. (2006) The economic value of cultural diversity: evidence from US cities. *Journal of Economic Geography* 6, s. 9–44.

PARKINSON, J.; MANSBRIDGE J. (eds.) (2012) *Deliberative Systems*. Cambridge: Cambridge University Press.

PARROTTA, P., POZZOLI, D.; PYTLIKOVA, M. (2014) The Nexus between Labor Diversity and Firm's Innovation. *Journal of Population Economics,* 27(2), s. 303–364.

PARROTTA, P., POZZOLI, D.; SALA, D. (2016) Ethnic Diversity and Firms' Export Behavior, *European Economic Review* 89, s.248–263.

PARROTTA, P.; POZZOLI, D.; PYTLIKOVA, M. (2014) Does Labour Diversity affect Firm Productivity? *European Economic Review* 66, s. 144–179.

PATEMAN, C. (2012) Participatory Democracy Revisited. *Perspectives on Politics* 10(1), s. 7–19.

PECHÁČEK, Š. (2013) Personalizace v české politice. *Politologická revue* 19(2), s. 93–109.

PELL, C. (ed.) (2012) *Delivering Public Services That Work, Vol. 2.* Axminster: Triarchy Press.

PERI, G. (2014) *Do immigrant workers depress the wages of native workers?* IZA Institute of Labor Economics, IZA World of Labor.

PERI, G.; BASSO, G. (2016) *Opportunity Lost: The Economic Benefit of Retaining Foreign-Born Students in Local Economies.* Dostupné z: https://www.thechicagocouncil.org/sites/default/files/report_economic_benefit_retaining_foreign-born_students.pdf.

PERTOLD-GEBICKÁ, B. (2014) Job Market Polarization and Employment Protection in Europe. *Acta VŠFS* 8(2), s. 132–148.

PERTOLD-GEBICKÁ, B.; HUŠEK, D. (2015) *Female Labor Force Participation and Childcare Policies*. IES Occasional Paper 2015(1). Dostupné z: http://ies.fsv.cuni.cz/sci/publication/show/id/5245/lang/cs.

PIAAC. Výstupy výzkumu PIAAC*. PIAAC* [online]. Dostupné z: http://www.piaac.cz/vystupy_vystupy.

PIASNA, A. (2015) *Nonstandard work arrangements, employment regulation and inequalities*. IBS Jobs Conference, Warsaw. Dostupné z: http://ibs.org.pl/app/uploads/2015/10/Piasna-Nonstandard-work-arrangements-inequalities-anAronssond-employment-regulation-in-the-EU.pdf.

PIKETTY, T. (2014) *Capital in the 21th Century*. Cambridge (Massachusetts): The Belknap Press of Harvard University Press.

PODHRÁZSKÁ, J.; KARÁSEK, P. (2014) *Systém analýzy území a návrhu opatření k ochraně půdy a vody v krajině: podklad pro územní plánování a pozemkové úpravy*. Výzkumný ústav meliorací a ochrany půdy, v. v. i., Praha.

POLÁŠEK, M.; NOVOTNÝ, V.; PEROTTINO, M. A KOL. (2012) *Mezi masovou a kartelovou stranou: možnosti teorie při výkladu vývoje ČSSD a KSČM v letech 2000–2010*. Praha, SLON.

POLLIT, CH.; BOUCKAERT, G. (2011) *Public Management Reform: a comparative analysis NPM, governance and the Neo-weberian state* [3. vyd.] Oxford: Oxford University Press.

PRETEL, J. ET AL. (2011) *Zpřesnění dosavadních odhadů dopadů klimatické změny v sektorech vodního hospodářství, zemědělství a lesnictví a návrhy adaptačních opatření. Závěrečná zpráva o řešení 2007–2011.* Český hydrometeorologický ústav.

PROKOP, D. (2016) Chudoba je v ČR daleko hlubší, než se běžně usuzuje - rozhovor s Danielem Prokopem. *Rozhovor Britských listů*. Dostupné z https://www.youtube.com/watch?v=0ZCl4mQ6j08.

PROUZOVÁ, Z. (2015) *Vývoj a současný stav českých NNO v makroekonomických ukazatelích.* [Studie pro Koncepci politiky vlády vůči NNO do roku 2020, verze k 1. 3. 2015.] Dostupné z: http://www.vlada.cz/assets/ppov/rnno/dokumenty/studie_prouzova_data_a_fakta_o_neziskovem_sektoru_1.pdf.

PYTLIKOVÁ, M. (2015) *Rozdíly ve výši výdělků ve vztahu k mateřství a dítěti v rodině*. IDEA studie 11-2015. Praha: Národohospodářský ústav AV ČR.

QOG INSTITUTE (QUALITY OF GOVERNMENT INSTITUTE). Data. *Quality of Government Institute* [online]. Dostupné z: http://qog.pol.gu.se/data

QUINLAN, M.; MAYHEW, C.; BOHLE, P. (2001) The Global Expansion of Precarious Employment, Work Disorganization, and Consequences for Occupational Health: a Review of Recent Research. *International Journal of Health Services,* 31(2), s. 335-414.

QVORTRUP, M. (2013) *Direct Democracy: A Comparative Study of the Theory and Practices of Government by the People*. Manchester: Manchester University Press.

QVORTRUP, M. (2014) Power to the People? But How? *Political Studies Review* 13(1), s. 37–45.

REIF J.; ŠKORPILOVÁ J.; VERMOUZEK Z.; ŠŤASTNÝ K. (2014) Změny početnosti hnízdních populací běžných druhů ptáků v České republice za období 1982–2013: analýza pomocí mnohodruhových indikátorů. *Sylvia 50*, s. 41–65.

REIF, J.; VOŘÍŠEK, P.; ŠŤASTNÝ, K.; BEJČEK, V.; PETR, J. (2008) Agricultural intensification and farmland birds: new insights from a central European country. Ibis 150(3), s. 596–605.

REIF, J.; VOŘÍŠEK, P.; ŠŤASTNÝ, K.; KOSCHOVÁ, M.; BEJČEK, V. (2008) The impact of climate change on long-term population trends of birds in a central European country. *Animal Conservation* 11, s. 412–421.

ROTHSTEIN, B. (2011) *The Quality of Government: Corruption, Social Trust and Inequality in International Perspective*. Chicago, London: The University of Chicago Press.

ROY, A. S. (1997) Job displacement effects of Canadian immigrants by country of origin and occupation. *International Migration Review,* 31(1), s. 150–161.

RUTH, S.; WELP, Y.; WHITEHEAD, L. (ed.) (2017) *Let the people rule?: Direct Democracy in the Twenty-First Century*. Colchester: ECPR Press.

SCARROW, S. (2015) *Beyond Party Members: Changing Approaches to Partisan Mobilization*. Oxford: Oxford University Press.

SEDDON, J. (2008) *Systems Thinking in the Public Sector: The failure of the reform regime… and a manifesto for a better way*. Axminster: Triarchy Press.

SEDDON, J. [Vanguard Consulting] (2014) *Saving money by doing the right thing.* Dostupné z: http://locality.org.uk/wp-content/uploads/Locality-Report-Diseconomies-updated-single-pages-Jan-2017.pdf.

SEN, A. (1995) *Development as Freedom*. New York: Alfred A. Knopf.

SCHÄFER, A. (2013) Liberalization, Inequality and Democracy's Discontent, in SCHÄFER, A.; STREECK, W. (ed.) *Politics in the Age of Austerity.* Cambridge UK, Malden USA. Polity Press, s. 169–195.

SIMONOVÁ, N.; SOUKUP, P. (2010) Působení primárních a sekundárních faktorů sociálního původu při přechodu na vysokou školu v ČR: výsledky výzkumu PISA-L. In MATĚJŮ, P.; STRAKOVÁ, J.; VESELÝ, A. (eds) *Nerovnosti ve vzdělávání: od měření k řešení.* Praha: SLON, s. 130–149.

SKILLS PANORAMA. European Skills and Jobs Survey. *Skills Panorama* [online]. Cedefop, the European Centre for the Development of Vocational Training. Dostupné z: http://skillspanorama.cedefop.europa.eu/en/content/european-skills-and-jobs-survey.

SMITH, G. (2009) *Democratic Innovations: Designing Institutions for Citizen Participation*. Cambridge: Cambridge University Press.

SMITH, N.; PARROTTA, P. (2015) Why so few women on board of directors? Empirical evidence from Danish companies 1998–2010, *Journal of Business Ethics,* (elektronicky publikováno 30. 11. 2015, zatím není zařazeno do čísla). DOI: 10.1007/s10551-015-2974-9.

SOBIECH, R. (2012) *Image and Attractivity of Central Government Administrations: a Report for European Social Dialogue Committee in Central Government Administrations.*

SOCIOTRENDY (2016) *Zhodnocení vazeb mezi vybranými globálními megatrendy a jejich vlivu na vybrané klíčové oblasti rozvoje České republiky do roku 2030*. Dostupné z: http://www.vlada.cz/assets/ppov/udrzitelny-rozvoj/CR-2030/Zhodnoceni_vazeb_mezi_vybranymi_megatrendy_final.pdf.

SOLT, F. (2008) Economic Inequality and Democratic Political Engagement. *American Journal of Political Science*, 52(1), s. 48–60.

SPARBER, CH. (2009) Racial diversity and aggregate productivity in US industries: 1980–2000. *Southern Economic Journal* 75, s. 829–856.

SPARBER, CH. (2010) Racial diversity and macroeconomic productivity across US states and cities. *Regional Studies* 44, s. 71–85.

STOLTE, J.; TESFAI, M.; ØYGARDEN, L.; KVÆRNØ, S.; KEIZER, J.; VERHEIJEN, F.; PANAGOS, P.; BALLABIO, C.; HESSEL, R. (eds.) (2016) *Soil threats in Europe: status, methods, drivers and effects on ecosystem services.* European Commission Joint Research Centre, Luxembourg.

STRAKOVÁ, J. (2010) Přidaná hodnota studia na víceletých gymnáziích ve světle dostupných datových zdrojů. *Sociologický časopis 46(2),* s.187–210.

STRAKOVÁ, J. (2010) Přidaná hodnota víceletých gymnázií ve světle dostupných datových zdrojů. In MATĚJŮ, P., STRAKOVÁ, J., VESELÝ, A. (eds) *Nerovnosti ve vzdělávání: od měření k řešení.* Praha: SLON, s. 130–150.

STRAKOVÁ, J.; VESELÝ, A. (eds.) (2013) *Předpoklady úspěchu v práci a v životě: Výsledky mezinárodního výzkumu dospělých OECD.* Dostupné z: www.piaac.cz/attach/PIAAC_publikace_web.pdf.

SUEDEKUM, J.; WOLF, K.; BLIEN, U. (2009) Cultural Diversity and Local Labor Markets. *IZA Discussion Paper No. 4619*.

SVOBODA, P.; OUŘEDNÍČEK, M. (2015) Flexibilita a lokalizace práce: přehled konceptuálních náhledů a jejich relevance pro výzkum metropolitních regionů v Česku. *Ekonomický časopis* 63(5), s. 465–485.

SVOBODOVÁ, L.; MLEZIVOVÁ, I.; VINOPAL, J.; ČERVENKA, J. (2015) *Proměny kvality pracovního života*. Praha, Výzkumný ústav bezpečnosti práce, v. v. i.

ŠATAVA, J. (2015) *Pracovní aktivita po dosažení důchodového věku: Institucionální pobídky v České republice.* IDEA studie 9-2015. Praha: Národohospodářský ústav AV ČR.

ŠIMEČKOVÁ, M. (2015) *Osoby na mateřské a rodičovské dovolené a osoby pečující o osobu blízkou a další profesní vzdělávání: postoje, zkušenosti, bariéry.* Fond dalšího vzdělávání. [Výstupní analytická zpráva projektu KOOPERACE.] Dostupné z: https://koopolis.cz/file/home/download/790?key=1a5edcab4b.

ŠŤASTNÁ, A.; ŠPROCHA, B.; KOCOURKOVÁ J. (2016) *The Transition of Childbearing Patterns from the Cohort Perspective in relation to Family Policy: a Comparison of the Czech Republic and Slovakia.* [Presented in July 2016 at the EPC2016 conference, Mainz, Germany.]

TEEB (2009) The Economics of Ecosystems and Biodiversity. *TEEB Climate Issues Update*. Dostupné z: http://www.teebweb.org/publication/climate-issues-update/.

TECHNOPOLIS (2012) *Trends and Challenges in Public Sector Innovation in Europe*.

TI (TRANSPARENCY INTERNATIONAL ČR) (2016) *Analýza místních referend 2014*. Praha: Transparency International – Česká republika.

TI (TRANSPARENCY INTERNATIONAL) (2016) *Index vnímání korupce 2015.* Dostupné z: https://www.transparency.cz/cpi2015/.

TIERNEY, K. (2014) *Social Roots of Risk: producing disasters, promoting resilience*. Stanford: Stanford University Press.

TORFING, J.; GUY PETERS, B.; PIERRE, J.; SØRENSEN, E. (2012) *Interactive Governance: Advancing the Paradigm.* Oxford: Oxford University Press.

ÚHÚL (ÚSTAV PRO HOSPODÁŘSKOU ÚPRAVU LESŮ BRANDÝS NAD LABEM) (2008) *Výstupy národní inventarizace lesů uskutečněné v letech 2011–2015*.

UK NEA (2011) [UK National Ecosystem Assessment – Technical Report] *Synthesis of Key Findings.* Dostupné z: http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx.

UNESCO (2016) *Global education monitoring report.* Education for people and planet: creating sustainable futures for all. Paris: UNESCO. Dostupné z: http://unesdoc.unesco.org/images/0024/002457/245752e.pdf.

UNESCO INSTITUTE FOR STATISTICS (2012*) International Standard Classification of Education ISCED 2011.* Dostupné z: http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf.

UNIVERSITY OF GOTHENBURG; KELLOGG INSTITUTE. Varieties of Democracy: global standards, local knowledge*. V-Dem.* [online]. Dostupné z: https://www.v-dem.net/en/.

ÚSTAV ÚZEMNÍHO ROZVOJE (2016) *Evidence územně plánovací činnosti v České republice – stav k 31. 12. 2015*. Dostupné z: http://www.uur.cz/default.asp?ID=4979.

ÚV ČR (ÚŘAD VLÁDY ČR) (2011, resp. 2016) *Obecné zásady hodnocení dopadů regulace* (RIA).

ÚV ČR (ÚŘAD VLÁDY ČR) (2013) *Strategie působení ČR v EU: aktivní politika pro růst a konkurenceschopnou Evropu.*

ÚV ČR (ÚŘAD VLÁDY ČR) (2014) *Akční plán ČR „Partnerství pro otevřené vládnutí" na období let 2014–2016.*

ÚV ČR (ÚŘAD VLÁDY ČR) (2014) *Vládní koncepce boje s korupcí na léta 2015–2017.*

ÚV ČR (ÚŘAD VLÁDY ČR) (2014) *Vládní strategie pro rovnost žen a mužů v ČR na léta 2014–2020.*

ÚV ČR (ÚŘAD VLÁDY ČR) (2015) [Oddělení strategií a trendů] *Dopady digitalizace na trh práce v ČR a EU.* Dostupné z: http://www.vlada.cz/assets/evropske-zalezitosti/analyzy-EU/Dopady-digitalizace-na-trh-prace-CR-a-EU.pdf.

ÚV ČR (ÚŘAD VLÁDY ČR) (2015) *Akční plán pro rozvoj digitálního trhu*.

ÚV ČR (ÚŘAD VLÁDY ČR) (2015) *Bezpečnostní strategie České republiky.*

ÚV ČR (ÚŘAD VLÁDY ČR) (2015) *Metodika hodnocení dopadů na rovnost žen a mužů pro materiály předkládané vládě ČR*.

ÚV ČR (ÚŘAD VLÁDY ČR) (2015) *Státní politika vůči NNO na léta 2015–2020*.

ÚV ČR (ÚŘAD VLÁDY ČR) (2016) [Legislativní rada vlády ČR] *Výroční zpráva Legislativní rady vlády za rok 2015.*

ÚV ČR (ÚŘAD VLÁDY ČR) (2016) [Legislativní rada vlády ČR]; KOMISE RIA (2013) *Výroční zpráva Komise RIA*.

ÚV ČR (ÚŘAD VLÁDY ČR) (2016) [Rada vlády pro udržitelný rozvoj] *Situační zpráva ke Strategickému rámci udržitelného rozvoje České republiky.*

ÚV ČR (ÚŘAD VLÁDY ČR) (2016) *Akční plán na podporu hospodářského růstu a zaměstnanosti – aktualizace pro rok 2016*.

ÚV ČR (ÚŘAD VLÁDY ČR) (2016) *Akční plán pro vyrovnané zastoupení žen a mužů v rozhodovacích pozicích na léta 2016–2018.*

ÚV ČR (ÚŘAD VLÁDY ČR) (2016) *Metodika pro měření celkových nákladů na plnění povinností vyplývajících z regulace.*

ÚV ČR (ÚŘAD VLÁDY ČR) (2016) *Závěrečná sebehodnotící správa Akčního plánu ČR „Partnerství pro otevřené vládnutí" na období let 2014–2016.*

ÚV ČR (ÚŘAD VLÁDY ČR) (2016) *Zpráva za rok 2015 o rovnosti žen a mužů a o naplňování Vládní strategie pro rovnost žen a mužů v ČR na léta 2014–2020.*

ÚZEI (ÚSTAV ZEMĚDĚLSKÉ EKONOMIKY A INFORMACÍ) *(2016) Zpráva o trhu s biopotravinami v ČR v roce 2014. Brno.*

VAČKÁŘ, D.; FRÉLICHOVÁ, J.; LORENCOVÁ, E.; PÁRTL, A.; HARMÁČKOVÁ, Z.; LOUČKOVÁ, B. (2014) *Metodologický rámec integrovaného hodnocení ekosystémových služeb v České republice.* [Certifikovaná metodika, Centrum výzkumu globální změny AV ČR.]

VAN BERKEL, R.; DE GRAAF, D.; SIROVÁTKA, T. (ed.) (2011) *The Governance of Active Welfare State in Europe.* Houndmills, Basingstoke: Palgrave Macmillan.

VAN BERKEL, R.; VALKENBURG, B. (ed.) (2007) *Making It Personal: Individualising Activation Services in the EU*. Bristol: Policy Press.

VAN BIEZEN, I.; POGUNTKE, T. (2014) The Decline of Membership-based Politics. *Party Politics* 20 (2), s. 205–216.

VAN DER MEER, F.; RAASSCHELDERS, J.; TOONEN, T. (2015) *Comparative Civil Service Systems in the 21st Century*; 2. vyd. Houndmills, Basingstoke: Palgrave Macmillan.

VAN HAUTE, E., GAUJA, A. (ed.) (2015) *Party Members and Activists*. London, New York: Routledge.

VAN PARIJS, P. (1995) *Real Freedom for All.* Oxford: Clarendon Press.

VERME, P. (2011) Life satisfaction and income inequality. *Review of Income and Wealth* 57(1), s. 111–127. Journal of the International Association for Research in Income and Wealth.

VEŘEJNÝ OCHRÁNCE PRÁV (2006) *Souhrnná zpráva o činnosti veřejného ochránce práv za rok 2006.* Dostupné z: http://www.ochrance.cz/fileadmin/user_upload/zpravy_pro_poslaneckou_snemovnu/Souhrnna_zprava_VOP_2006.pdf.

VESELÝ, A. (2012) Institucionalizace neodpovědnosti, efektivity, nebo konformity? Reformy organizací veřejných služeb v teorii akontability. *Sociologický časopis* 48 (4), s. 757–784.

VESELÝ, A. (2013) Accountability in Central and Eastern Europe: concept and reality. *International Review of Administrative Sciences* 79 (2), s. 310–330.

VESELÝ, A., MATĚJŮ, P. (2010) Vzdělávací systémy a reprodukce vzdělanostních nerovností. In MATĚJŮ, P.; STRAKOVÁ, J.; VESELÝ, A. (eds.) *Nerovnosti ve vzdělávání: od měření k řešení*. Praha: SLON.

VĚZEŇSKÁ SLUŽBA ČR (2015) *Statistická ročenka Vězeňské služby ČR.* Dostupné z: http://www.vscr.cz/generalni-reditelstvi-19/informacni-servis/statistiky-a-udaje-103/statisticke-rocenky-1218/.

VIGODA-GADOT, E.; SHOHAM, A.; VASHDI, D. (2010) Bridging bureaucracy and democracy in Europe: a comparative study of perceived managerial excellence, satisfaction with public services, and trust in governance. *European Union Politics* 11(2), s. 289–307.

VIGODA-GADOT, E.; ZALMANOVITSCH, Y.; BELONOGOV, A. (2012) Public Servants' Trust in Citizens: An Extension of Theory and an Empirical Examination with Structural Equation Modeling. *Public Organization Review* 12(4), s. 383–399.

VLÁDA ČR (2002) *Usnesení vlády České republiky č. 164 k návrhu záměru zákona o standardizaci vybraných veřejných služeb*, ze dne 20. února 2002.

VLÁDA ČR (2015) *Tisková zpráva Vláda podpořila směrnici na vyšší zastoupení žen ve vedení velkých firem.* Archiv zpráv minulých vlád. [2. 12. 2015] Dostupné z: http://www.vlada.cz/cz/clenove-vlady/pri-uradu-vlady/jiri-dienstbier/aktualne/vlada-podporila-smernici-na-vyssi-zastoupeni-zen-ve-vedeni-velkych-firem-137746/.

VLÁDA ČR (2016) *Usnesení vlády České republiky č. 631 o dvoustranné rozvojové zahraniční spolupráci v roce 2017 a ke střednědobému výhledu jejího financování do roku 2019,* ze dne 11. července 2016.

VOHLÍDALOVÁ, M.; MAŘÍKOVÁ, H.; ČERMÁKOVÁ, M.; VOLEJNÍČKOVÁ, R. (2016) *Sólo pro soprán: O ženách v české politice.* Praha: Sociologický ústav AV ČR.

VOPRAVIL, J.; KHEL, T.; HLADÍK, J.; HERIAN, J.; HAVELKOVÁ, L. (2016) *Metodika půdního průzkumu zemědělských pozemků určená pro pachtovní smlouvy.* VÚMOP, v. v. i., Praha.

VÚMOP (VÝZKUMNÝ ÚSTAV MELIORACÍ A OCHRANY PŮDY, V. V. I.) (2012) *Identifikační systém pro řešení problematiky odvodňovacích zařízení v České republice, etapa II.* [Závěrečná zpráva pro MZe.]

Vyhláška č. 78/2013 Sb., o energetické náročnosti budov, *ze* dne 29. března 2013.

VÝZKUMNÝ ÚSTAV MELIORACÍ A OCHRANY PŮDY, V. V. I.); ČHMÚ (Český hydrometeorologický ústav) (2016) *Vliv očekávaných klimatických změn na půdy České republiky a hodnocení jejich produkční funkce.* [Projekt NAZV QJ1230056].

WAENERLUND, A.; GUSTAFSSON, P.; VIRTANEN, P.; HAMMARSTRÖM, A. (2011) Is the core-periphery labour market structure related to perceived health? findings of the Northern Swedish Cohort. *BMC Public Health* 11(1).

WAGENAAR, H. (2015) *Meaning in Action: Intepretation and Dialogue in Policy Analysis.* London, New York: Routledge.

WB (WORLD BANK) CO_2 emissions (metric tons per capita). *World Bank* [online]. Dostupné z: http://data.worldbank.org/indicator/EN.ATM.CO2E.PC?locations=CZ.

WB (WORLD BANK) Doing Business. *World Bank* [online]. Dostupné z: http://data.worldbank.org/data-catalog/doing-business-database.

WB (WORLD BANK) Population Estimates and Projections*. World Bank* [online]. Dostupné z: http://data.worldbank.org/data-catalog/population-projection-tables.

WB (WORLD BANK) Worldwide Governance Indicators. *World Bank* [online]. Dostupné z: http://info.worldbank.org/governance/wgi/index.aspx#home.

WEEKS, J. (2014) *Economics of 1 %: How Mainstream Economics Serves the Rich, Obscures Reality and Distorts Policy*. London, New York: Anthem Press.

WHO (2016) *HBSC – Health Behaviour in School-aged Children: WHO Collaborative Cross-National study.* Dostupné z: http://www.hbsc.upol.cz/.

WOLFF, R. (2012) *Democracy at work: a cure for capitalism*. Chicago: Haymarket Books.

WTO (2015) *Ministerial Conference, Tenth Session – Ministerial Declaration and Decisions*. [Nairobi, 15.–19. 12. 2015] Dostupné z: https://www.wto.org/english/thewto_e/minist_e/mc10_e/nairobipackage_e.pdf.

Zákon č. 100/2001 Sb., o posuzování vlivů na životní prostředí a o změně některých souvisejících zákonů (zákon o posuzování vlivů na životní prostředí), ze dne 20. února 2001.

Zákon č. 106/1999 Sb., o svobodném přístupu k informacím, ve znění pozdějších předpisů, ze dne 11. května 1999.

Zákon č. 111/2009 Sb., o základních registrech, ve znění pozdějších předpisů, ze dne 26. března 2009.

Zákon č. 118/2010 Sb., o krajském referendu a o změně některých zákonů (krajské referendum), ze dne 9. března 2010.

Zákon č. 121/2000 Sb., o právu autorském, o právech souvisejících s právem autorským a o změně některých zákonů (autorský zákon), ve znění pozdějších předpisů, ze dne 7. dubna 2000.

Zákon č. 128/2000 Sb., o obcích (obecní zřízení), ze dne 12. dubna 2000.

Zákon č. 134/2016 Sb., o zadávání veřejných zakázek, ze dne 19. dubna 2016.

Zákon č. 198/2009 Sb., o rovném zacházení a o právních prostředcích ochrany před diskriminací a o změně některých zákonů (antidiskriminační zákon), ze dne 23. dubna 2008.

Zákon č. 22/2004 Sb. o místním referendu a o změně některých zákonů (místní referendum), ze dne 11. prosince 2003.

Zákon č. 222/2015 Sb., kterým se mění zákon č. 106/1999 Sb., o svobodném přístupu k informacím.

Zákon č. 222/2016 Sb., o Sbírce zákonů a mezinárodních smluv a o tvorbě právních předpisů vyhlašovaných ve Sbírce zákonů a mezinárodních smluv (zákon o Sbírce zákonů a mezinárodních smluv) ve znění pozdějších předpisů, ze dne 15. června 2016.

Zákon č. 234/2014 Sb., o státní službě, ze dne 1. října 2014.

Zákon č. 298/2016 Sb., kterým se mění některé zákony v souvislosti s přijetím zákona o službách vytvářejících důvěru pro elektronické transakce, ze dne 24. srpna 2016.

Zákon č. 302/2016 Sb., kterým se mění zákon č. 424/1991 Sb., o sdružování v politických stranách a v politických hnutích, ve znění pozdějších předpisů, ze dne 24. srpna 2016.

Zákon č. 322/2016 Sb., kterým se mění volební zákony a další související zákony, ze dne 6. září 2016.

Zákon č. 340/2015 Sb., o zvláštních podmínkách účinnosti některých smluv, ze dne 24. listopadu 2015.

ZELENSKI, J. M.; DOPKO, R. L.; CAPALDI, C. A. (2015) Cooperation is in our nature: nature exposure may promote cooperative and environmentally sustainable behavior. *Journal of Environmental Psychology* 42, s. 24–31.

ZELENÝ KRUH A HNUTÍ DUHA (2005) *Česká stopa – ekologické a sociální dopady naší spotřeby za našimi hranicemi.* Dostupné z: http://www.zelenykruh.cz/wp-content/uploads/2015/01/Ceska-stopa.pdf.

ZOKAEI, E.; SEDDON, J.; O´DONOVAN, B. (eds.) (2011) *Systems Thinking: from heresy to practice.* Houndmills, Basingstoke: Palgrave MacMillan.

List of abbreviations

AMECO	Annual Macro-Economic database
NCA CR	Nature Conservation Agency of the Czech Republic
B(a)P	benzo(a)pyrene
BIS	Security Information Service
CLLD	Community Led Local Development
CLLD-U	Community Led Local Development – Urban Areas
CVVM	Public Opinion Research Centre
CHMI	Czech Hydrometeorological Institute
CR 2030	*Czech Republic 2030* (Strategic framework *Czech Republic 2030*)
CR	Czech Republic
CZSO	Czech Republic Statistical Office
DG	Directorate General
DMC	Domestic Material Consumption
DMI	Direct Material Input
DOI	Digital Object Identifier
DRR	Disaster Risk Reduction
ECOSOC	United Nations Economic and Social Council
EEA	European Environment Agency
EIGE	European Institute for Gender Equality
EIPA	European Institute of Public Administration
EC	European Commission
EMAS	Eco Management and Audit Scheme
EMS	Environmental Management System
EP	European Parliament
ERIH	European Route of Industrial Heritage
ERÚ	Energy Regulation Office
ESCS	Economic Social and Cultural Status
ESIF	European Structural and Investment Funds
ETC/BD	European Topic Centre on Biological Diversity
EU	European Union
EWCS	European Working Conditions Surveys
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
GCF	Green Climate Fund
GERD	Gross Domestic Expenditure on Research and Development
GHG	Greenhouse Gases
GMT	global megatrend
GDP	gross domestic product
HIA	Health Impact Assessment
GNI	gross national income
GVA	gross value added
ICLEI	International Council for Local Environmental Initiatives
ICT	Information and Communication Technology
IGO	Inter-Governmental Organization
IT	information technology
KA	key area

LPIS	Land Parcel Identification System
LAG	local action groups
MDGs	Millennium Development Goals
MRD	Ministry for Regional Development
MoD	Ministry of Defence
ILO	International Labour Organization
MLSA	Ministry of Labour and Social Affairs
SME	Small and Medium Enterprises
MoI	Ministry of the Interior
MA	Ministry of Agriculture
NEA	National Ecosystem Assessment
NCG	National Coordination Group
NGO	Non-Government Organization
NPM	New Public Management
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
MEC	municipalities with extended competence
UN	United Nations
SEP	self-employed persons
DSD OG CR	Department for Sustainable Development of the Office of the Government
RER	Renewable energy resources
DP	disabled persons
p. p.	percentage point
PAH	polycyclic aromatic hydrocarbons
PCT	Patent Cooperation Treaty
PIAAC	Programme for the International Assessment of Adult Competencies
PISA	Programme for International Student Assessment
PM_{10}	flying dust – suspended particles smaller than 10 micrometres
$PM_{2.5}$	flying dust – suspended particles smaller than 2.5 micrometres
PPP	Purchasing Power Parity
FDI	foreign direct investments
QoG Institute	Quality of Government Institute
RHSD	Council of Economic and Social Agreement of the Czech Republic
RIA	Regulatory Impact Assessment
RIS MfRD	Regional information service of the MfRD CR
RCG	Regional Coordination Group
GCSD	Government Council for Sustainable Development
s.e.	state enterprise
SDGs	Sustainable Development Goals
CTQ	compound tax quota
SEA	Strategic Environmental Assessment
SILC	Statistics on Income and Living Conditions
SLDB	population census
SFSD	Strategic framework for sustainable development
SZIF	State Agricultural and Intervention Fund
TEEB	The Economics of Ecosystems and Biodiversity
TI	Transparency International

TIA	Traffic Impact Assessment
TQM	Total Quality Management
FMI	Forest Management Institute
OG CR	Office of the Government of the Czech Republic
PRI	public research institution
R&D	research and development
PDB CZSO	Public Database of the CZSO
RILOG	The Silva Tarouca Research Institute for Landscape and Ornamental Gardening, public research **institute**
RSWC	Research Institute for Soil and Water Conservation, public research institute
RILSA	Research Institute for Labour and Social Affairs, public research institute
VÚV T. G. M.	T. G. Masaryk Water Research Institute, public research institute
WGI	Worldwide Governance Indicators
WHO	World Health Organization
WTO	World Trade Organization
ZPF	Agricultural Soil Fund
FDC	Foreign development cooperation

List of diagrams

List of charts

List of figures