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**Social stratification in the Czech Republic
and polarization of Czech society**



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Managerial summary

The submitted study describes current trends considering the society polarization in the Czech Republic and identifies key factors which significantly influence the polarization.

The first chapter deals with the main principles of class analysis, we introduce the concepts of Mannheim, Marx, Weber and social capitals of Bourdieu. Social classes are important because they form thinking of a human, form his opinions and approaches and therefore his actions, too. People's behaviour is influenced not only by their property situation but also by education and social connections. We also introduce classic ESeC classes scheme used by Eurostat (in several versions) as well as an alternative concept based on precariat. We also follow the latest research of society polarization, carried out by the SoÚ AV ČR workers for Český rozhlas. We consider it important that in the Czech Republic, no strong higher class has been formed even after 30 years of market economy. In the conclusion, some significant changes in the educational structure of Czech population are described.

The second chapter is dedicated to the area of reproduction of educational inequalities, therefore the fact that a child does not have an equal chance for good-quality education depending on what family s/he was born to. Achieved education then influences his/her movement in the labour market considering a risk of unemployment as well as an amount of incomes. We describe an elementary socially stratification triangle (origin - education - destination) and we explain the reasons for educational reproduction across generations. Educational reproduction is very strong in Czech society, only less than 5 % children of parents with elementary education obtains a university diploma. On the contrary, children from families with university education have more than fifty percent chance to complete university education, too, and it's almost 90% certain they will not have lower education than the secondary one with maturita. We also study in detail reproductions of educational inequalities according to gender as well as structure development of university students. The strength of educational reproduction between parents and children decreases due to an influence of education expansion, nevertheless, polarization of Czech society still deepens. Due to education expansion, educational inequalities decreased again in the quantitative dimension (achieved level of education), nevertheless, the qualitative dimension of inequalities (school type or quality) remains.

In chapter three, we look into the individual factors of income inequalities based on data from the Information system regarding average income. Those data make it possible to classify incomes not only according to company characteristics but also according to personality

characteristics of employees. We particularly look into the wage sphere and the salary sphere. Incomes (which is quite expected) differ according to age as well as gender, income differences according to age, however, significantly differ in both spheres. In the wage sphere, the highest income appears in the middle age group, whereas in the salary sphere, it was in the highest one. At the same time, we can see that in 2011 - 2018, salaries grew one third faster compared to wages. Incomes differ according to education, while there is a higher education bonus in the wage sphere, and compared to income sphere, differences disappear in time. Hand in hand with that, also regional differences decrease in the wage sphere. We also introduce a possible use of decomposition of the changeable content index. Using it, we find that in 2011 - 2014, development of average wages was influenced not only by a change in remuneration but also by a change in a structure of employment according to education. In conclusion of the third chapter, we go back to the analysis of remuneration between wage and salary sphere. Manual as well as non-manual workers are rewarded better in the wage sphere compared to income sphere, nevertheless, a higher proportion of non-manual workers in the income sphere results in a higher average wage in the income sphere compared to wage one.

Chapter four is dedicated to the polarization factors of values and opinions in Czech society (gender, age, education, economic activity, employer sector, size of municipality). The importance of the individual aspects of life is polarized by gender and education, polarization factors of trust in the individual groups of people are education, age, employer sector and size of municipality, values concerning good work are polarized the most by education, employment sector and type of economic activity, partly also by age and gender. In case of responsibility towards society, respondents differ in their opinions according to education, age, employment, employer and size of municipality but not gender. Clear dividing lines in the area of gender equality on labour market are considered to be a level of achieved education and respondent's age.

Considering a key importance of education for a position on labour market, for formation of stances and values and considering the reproduction of educational reproduction, we recommend to pay attention to changes of education system in a way for education system (i) to allow maximum potential development of every child's, pupil's or student's potential and at the same time (ii) to decrease dependence of achieved education on socio-economic environment where a child is brought up.

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Introduction¹

Social stratification as a structured inequality among various groups of people makes it possible to analyse the hierarchic arrangement of individual social classes. In the Czech Republic, we now speak about society polarization - in other words, about decomposition of middle class, and changing the three-class society into two-class one. Present development indicates that there are still barriers considering the transition between individual social classes, which is negatively demonstrated on labour market.

The aim of the study is to describe actual trends considering polarization of society in the Czech Republic and to identify key factors which significantly influence polarization. The study also contains a proposal of an arrangement to eliminate an effect of the factors.

The study is divided into four parts. Chapter one is dedicated to basic principles and theoretical possibilities of class analysis, therefore general problematics of social stratification. We describe the currently used as well as the alternative approaches to determine social classes. Chapter two is dedicated to actual problematics of reproduction of educational inequalities, therefore - besides other things - a chance for education depending on belonging to a social class. Chapter three focuses on income inequalities, therefore the differences in incomes according to age, gender, achieved education, place of work and type of work. Chapter four, the final chapter, is dedicated to dividing lines and factors that influence people's opinions, approaches and values.

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¹ Part of the introduction text is based on extended assignment of the study.

1. Basic principles of class analysis

Attempts to divide society into classes (in other words strata, this is where the term social stratification comes from) and to give the classes some common characteristics goes back long time. Though the French Revolution, which is generally considered to be the beginning of modern time, had equality as a motto, could never reach full social equality. Even in modern time, there are various differences between people, whether they are differences in incomes, property, social connections or education. The aristocracy class may have lost their inherited rights but for example bourgeoisie class came and gained their rights back.

1.1 Why to study society stratification

The problematics of dividing society into classes (social stratification) has become important on the turning of 19th and 20th century. The thinkers then could obviously notice that the French Revolution did not lead to absolute equality, which it promoted. (In a similar way, not even realistic socialism reached equality in the 20th century, and instead of old classes based on riches, new classes that differed by a level of access to the state bureaucratic apparat formed). Together with ongoing democratization of the public matters administration, especially with gradual expansion of voting right, it began to show at the turn of the 19th and 20th century that different groups of people and different opinions on the same issue. Basically, for the first time in history, different social classes started to discuss things at one table, and they were surprised they do not understand one another.

A breakthrough work, which described the situation correctly in 1929, was a book *Ideology and utopia* by a German philosopher and sociologist, Karl Mannheim. The author admitted in the book what others had already found out - that different social groups interpret social reality differently depending on what social background they come from. Each social group has its own aims and interpretation frameworks. A way out from this flood of „various truths“ should be, according to him, socially unanchored intelligence, therefore university graduates. Thanks to its different social origin and achieved education, they should be, according to Mannheim, able to see the interests of all social groups and reach the real truth.

The basics of class analysis of the former society were laid, even before Mannheim, two German thinkers, Karel Marx and Max Weber. In Marx's concept, society is divided to two large groups that differ in their relationship to production tools. One group owns and controls production means (factories, fields or similar). However, they need the second group which

does not own production tools, but which may use them. Marx called the first group bourgeoisie, the second one was called proletariat. He pointed out that groups with the same specification appeared - under different names - in each social establishment (slave owners versus slaves, feudal versus villains). Marx called a group of people determined by its relationship to production means as a class about themselves. At the moment when this class becomes aware there are common interests (and accepts its historical role), it becomes a class for itself. Class awareness and class interests are important are terms of thought we will soon get back to.

Max Weber introduced a different approach to social stratification. In his interpretation, a position of a human in society consists of three more or less independent parameters - class position, occupation status and political power. Weber as well as Marx describes the same behaviour of the members of the same class. On the contrary to Marx, he does not see the reason in the fact the class would become aware of its historical function. In his opinion, people in similar work positions have to deal with similar problems, have similar interests and therefore act in a similar way. Another source of social position is, according to Weber, a social status, which is based, besides other things, on property, education and performed job. Status groups, e.g. corporations, had real power in Weber's time. The third source of a social position is, in Weber's concept, political power, therefore membership in a political party and therefore a better political function.

A common consequence of Marx and Weber's division is a different behaviour of different classes representatives. Based on thorough observation of society, both authors concluded in their time that although a human is equipped by a free will, to a great extent, he behaves according to which social class he belongs to. So, a social class is a social power that forms a way of people's thinking, forming opinions and positions and therefore also actions. Which corresponds to the later findings of Karl Mannheim and it forces us to study class analysis of current societies until now.

**Social class forms a way of human thinking, formation
of his opinions and approaches and subsequently his
actions, too.**

1.2 Social capitals

As Marx's opinions received unpleasant historical connotations in the 20th century and Weber was almost forgotten except for a small group of sociologists, it was French philosopher Pierre Bourdieu who had to re-discover the class-based action for broader society. By monitoring Paris society (specifically left - intellectual and right - business bank of Seine), he came to conclusion that social status of a man is given by the so-called capitals.

Bourdieu spoke about economic capital, which involved all property and income. He then spoke about cultural capital, which described education in a broader sense (from an achieved degree of formal education, via ownership of books and pieces of art, to regular visits of cultural events).

Whereas a teacher may have a very strong culture capital, his economic capital was - in the then French society (but also in our current Czech one) significantly worse. In contrary to that, a banker has probably much higher economic capital and he lacks the culture capital.

The third capital Bourdieu paid attention to was social capital. That includes a network of social relations and acquaintance that a man is able to mobilize to enforce his interests.

People with a similar structure of capital are in similar positions in society. Bourdieu does not speak about social classes directly, but he admits the existence of the so-called distinctive cuts that separate similar groups of people. The groups act in a similar way, but also have similar taste and put similar importance of things (Bourdieu called these things jointly habitus).

People with a similar level of culture capital for example will consider important their children will have adequate culture knowledge. And it is not important whether the group involves relatively rich doctors as well as relatively poor teachers or librarians. But it is likely in different division that people with similar economic capital will consider an ownership of a house important, and it does not matter the group includes doctors, bankers or businessmen. While for example the teachers, who are similar to doctors considering cultural capital, will not consider an ownership of a house important.

Probably the biggest contribution of Pierre Bourdieu to class analysis is therefore a finding that human behaviour does not comply exclusively with a position on labour market (resp. property situation) but also with other characteristics, such as education or social connections.

Behaviour of people does not reflect their property situation but also education and social connections.

1.3 Modern approaches to classes analysis

The basics of modern classes analysis were formed by a British sociologist John Goldthorpe and his team. From the original Goldthorpe scheme of classes, a widely used classes scheme called EGP has developed (called after its authors Ericsson-Goldthorpe-Portocararová). That originally served just for British environment and its application to different countries was problematic. Therefore, the European statistical agency Eurostat placed an order, which led to formation of a similar scheme ESeC (European Socio-economic Classification). Available data include information about putting employees into the scheme EGP as well as placing employees to the ESeC scheme. Katrňák and Fučík (2010) empirically proved that current Czech society is more suitable for using the ESeC class scheme. The scheme is also used to collect data by European statistical agency Eurostat and therefore all national statistical institutions of the EU member states. Using the older, less suitable and officially not used EGP scheme therefore makes no sense, although it still sometimes appears in some older data files.

The basics of the ESeC class scheme are four large groups of people: employers, the self-employed, employees and those excluded from labour market. The fourth group involves all who are involuntarily excluded from the participation in labour market, for example those unemployed for a long time. For people who have already left labour market due to going to pension, alternatively they are unemployed for a short time (including e.g. parents on maternity leave), it is usually assumed in practice that they then maintain the characteristics of the class they belonged to last time. Notice a connection to Marx's concept of social classes – even in modern class schemes, the base for dividing society is created according to a relationship to production means to bourgeoisie and proletariat, in case of the ESeC to employers and ordinary workers.

ESeC is the currently used class scheme.

The largest group (about 90 %) are employees. Within this group, there was another gentler division according to a type of employment contract. Typically, we distinguish between a contract of performed work and a contract of a held function (the so-called salariate). An

employee who has a contract of performed work does the easily defined and easily controlled work. His obligations towards his employer are clearly given by his working hours, during which he can be continuously controlled by his superior. This category includes most blue-collar professions. On the other hand, an employee with a contract of a held function does work which is not easy to define and difficult to control by superiors. An employee works with no direct supervision and a high level of independency and responsibility is expected from him. His relationship with an employer does not end at the end of working hours but de facto goes on continuously. This category includes most managerial and specialized professions.

The ESeC scheme of classes establishes ten social classes in its basic look.

- Class 1: **Higher salary** – Big employers, higher professionals, administrative and management professions
- Class 2: **Lower salary** – Professional, administrative and management professions, higher technicians and managers
- Class 3: **Higher degree white collars** – Intermediate positions
- Class 4: **Minor bourgeoisie or independent** – Minor employers and private businessmen except for agriculture
- Class 5: **Minor bourgeoisie or independent** – Private businessmen, for example in agriculture
- Class 6: **Lower degree blue collars** – Lower managers and technicians
- Class 7: **Lower degree white collars** – Lower employees in services, sale and administration
- Class 8: **Qualified manual workers** – Lower positions of technical workers
- Class 9: **Half-qualified and non-qualified manual workers** – Employees with routine tasks
- Class 10: **Unemployed** – People not working and unemployed for a long time

For analytical purposes, the ESeC class scheme is often converted to options with a lower number of classes (the so-called collapsing or joining more classes together). Particularly the six-class, five-class and three-class versions are used:

Six-class version of the ESeC scheme

- Class 1: Higher salary + Class 2: Lower salary
- Class 3: White collars of a higher degree + Class 6: Blue collars of a lower degree

- Class 4: Minor bourgeoisie or independent + Class 5: Minor bourgeoisie or independent
- Class 7: White collars of a lower degree
- Class 8: Qualified manual workers
- Class 9: Semi-qualified and non-qualified manual tasks
- (Class 10: Unemployed)

Five-class version of the ESeC scheme

- Class 1: Higher salary + Class 2: Lower salary
- Class 3: White collars of a higher degree + Class 6: Blue collars of a lower degree
- Class 4: Minor bourgeoisie or independent + Class 5: Minor bourgeoisie or independent
- Class 7: White collars of lower degree
- Class 8: Qualified manual workers + Class 9: Semi-qualified and non-qualified manual tasks
- (Class 10: Unemployed)

Three-class version of the ESeC scheme

- Class 1: Higher salary + Class 2: Lower salary
- Class 3: White collars of a higher degree + Class 4: Minor bourgeoisie or independent + Class 5: Minor bourgeoisie or independent + Class 6: Blue collars of a lower degree
- Class 7: White collars of lower degree
- Class 8: Qualified manual workers + Class 9: Semi-qualified and non-qualified manual tasks
- (Class 10: Unemployed)

Historical development

The following graphs 1.1 and 1.2 indicate how division of Czech employees into the ESeC social classes developed in 1997–2018. A division to two graphs was required due to a change in the way of coding of performed employment, which Eurostat and Czech Statistical Authority began to use from 2011 on. A share of the individual ESeC classes record some jump as a result of this statistical mistake, which is confusing for the readers. It is therefore better to watch overall trends and their development.

Social scientists (e.g. Breen 2004) speak about two large transition all advanced countries of western type went through. The first transition involves transition from an agricultural society

to an industrial one, and it appeared from the moment of (the first) industrial revolution in the nineteenth century. From that moment, a share of agricultural workers in workforce continuously decreases, they most often move to the newly built industrial factories. After the second world war, there is a steep mechanisation of agriculture and a trend of emptying the agriculture primary production is even faster.

Really, graphs 1.1 and 1.2 businessmen in agriculture form an almost imperceptible light blue stripe between blue collars and minor bourgeoisie. They currently involve less than 1 % of population, although a proportion of people who work in agriculture is obviously a bit higher.

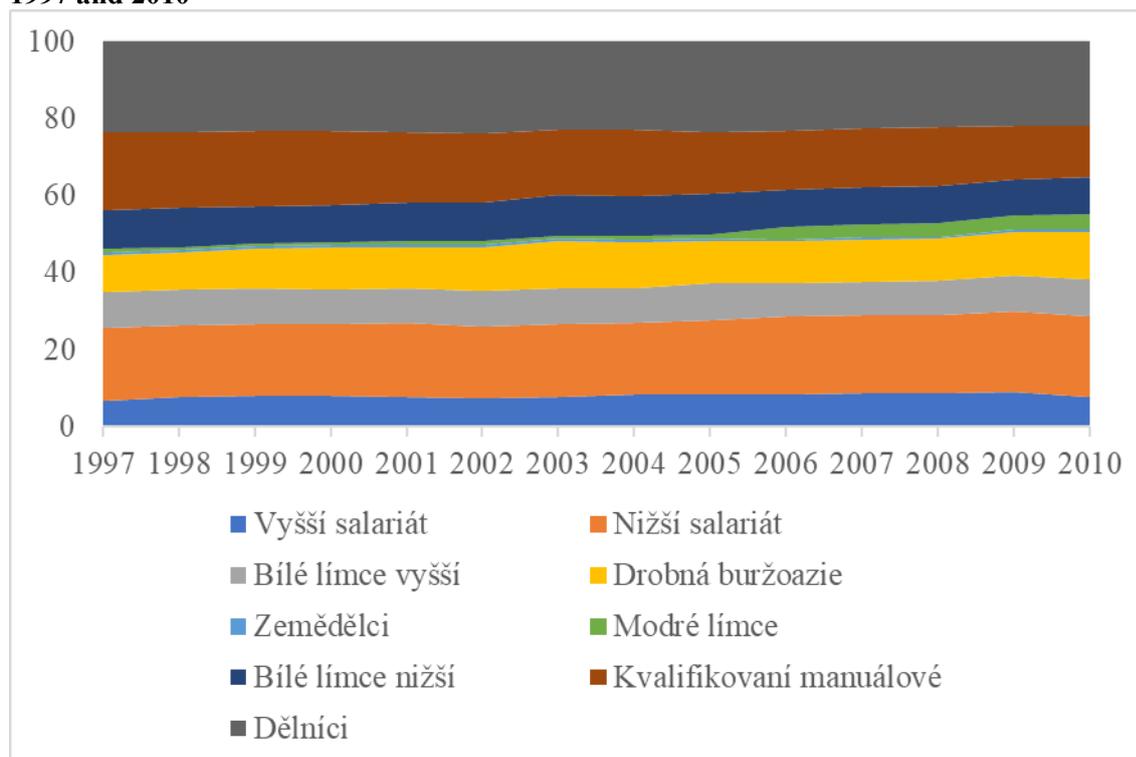
The second transition which the advanced countries went through according to Breen (2004) is gradual deindustrialisation and creation of a strong service sector. Breen dates the transition to the 1960s - 1970s, and it was about 20 years later in the post-socialistic countries, as the society was torn away from current things. A large part of production was put into machines and a significant proportion was transferred to countries with cheap work force.

Gradually, craftsmen are forced away from labour market (to a benefit of non-qualified workers at mechanical production), agriculture workers (to a benefit of unqualified workers and later agriculture mechanization) and non-qualified workers (to a benefit of qualified workers able to operate new technologies and workers in services).

This trend is much less apparent on graphs 1.1 and 1.2. A large part of workers in the service sector is hidden in the low classes of the ESeC scheme. For example, the work of non-qualified or even qualified workers may also include the work of gardeners, messengers, masseurs, couriers and other members of the service sector.

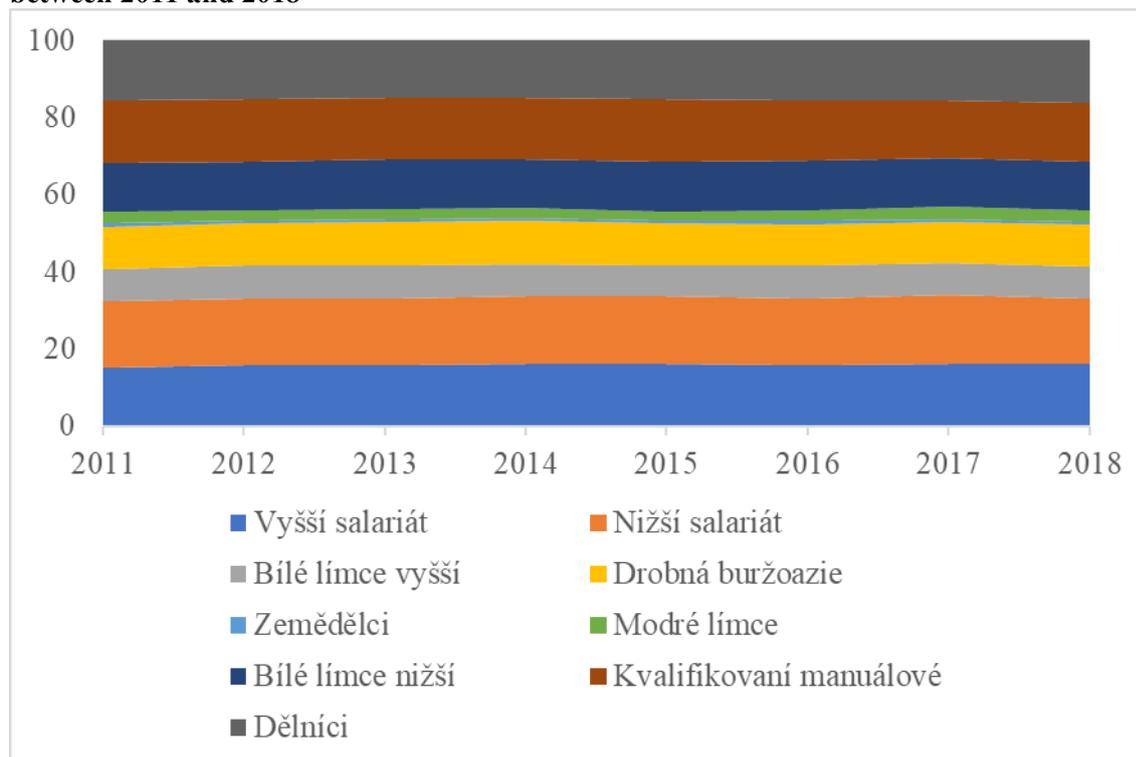
It's also good to mention a gradual increase of positions in the classes of salariate, which is now formed by about one third of working parents.

Graph 1.1 Development of classes division of Czech society according to the ESeC scheme between 1997 and 2010



Source: EU-LFS. Blue – higher salariat, white – higher white collars, light blue – agriculture workers, dark blue – lower white collars, grey – workers, orange – lower salariat, yellow – minor bourgeoisie, green – blue collars, brown – qualified manual workers

Graph 1.2 Development of the class division of Czech society according to the ESeC scheme between 2011 and 2018



Source: EU-LFS; For explanation of colours, see the notes under the previous graph.

1.4 Alternative concept of classes

Although the ESeC class scheme belongs, without any doubts, to the most frequently used ones in the current sociological research, there are also attempts to alternative definition of social classes. We will briefly introduce the most important ones in this part of the introduction chapter.

Precariat

The term precariat was implemented into social sciences by Guy Standing in his book *Precariat* (in Czech Standing 2018). This describes a newly created social class, which brings together (regardless their work position or a type of employment contract) all employees who suffer some form of insecurity in their employment. It may involve for example the following types of insecurities:

- Insecurity in a form of employer (agency employment, Schwartz system type of work)
- Insecurity in a form of employment lasting (temporary contract, working on invoices in a project regime)
- Insecurity in a form of enough hours (part-time job, various types of agreements to do with jobs done out of main employment)
- Insecurity in a form of employments rights protection (a right to holiday to recover, a right to sick leave, a right to parental leave, a right to strike etc.)

According to Standing, some groups of employees face a risk of precarization more than other ones. It involves especially women, people with lower education, fresh university graduates, people close to the end of their working career and other disadvantaged groups (ethnic minorities, migrants). Members of the groups are, more often than others, forced to accept work that shows some signs of precarization, as they do not have access to another one. Standing illustrates that on an example of young school graduates who, due to missing work experience, get their first jobs as temporary employment or part-time employment. Only when they finally have enough practical experience, they get access to positions with little or no precarization on labour market.

Standing calls this natural and historically often repeated development. Problem comes in case young school graduates do not leave the positions with high precarization fast enough and they remain closed in the so-called precarization trap.

Share of the precarization of work grows in the whole world together with growing pressure of the present economic system to flexibility of subscriber-supplier relationships, which also include flexibility of workforce. Employees are more and more often hired just for specific projects. Employers are able to change a size and structure of their work team quite fast depending on how many orders they manage to get.

Market chains are masters in the field, as they skilfully combine permanent workers and seasonal workers and agency workers, they have permanent workers to do overtime as needed or cut down their time at work. They simply do everything to have enough people in their shops considering a number of customers who usually come to a specific shop at the time and at the same time not to have wage expenses for employees they do not really need.

While such solution seems optimal in terms of costs from a viewpoint of market chains, male and female employees are not so keen at all. Instead of several full-time employees with security of permanent employment, number of hours at work and sure stable wage, market chains employ a significantly higher number of employees who face one or more types of insecurity (for more information see Bek 2019).

This is connected with a change of role of such employee in a working process. While it makes sense to invest time and financial resources into a stable worker, e.g. in the area of training, for instable ones, often agency workers, work needs to be organised in order to require only a minimum of specialised competences. Whereas a stable employee increased his qualification at work, precarized worker still remains on a very low level concerning qualification.

This sign is, by the way, one of the persisting attempts to explain salary inequalities between men and women. At the beginning of career, employers invest greater effort and more financial means into making qualification of their male employees higher. In case of employed women, they count on the possibility that women go to maternity or parental leave before they could pay off the expenses connected with training to her employer. Women come back to work after parental leave with a much lower qualification and significantly lower work experience compared to men of same age, which then discriminates them in terms of income all their careers.

Polarization of Czech society according to a research of Český rozhlas

In 2019, workers of the Sociologic Institute of Akademie věd CZ carried out an extensive research of Czech population (Kočí, Zlatkovský, Cibulka 2019), in which they empirically

identified six social classes. They were inspired by a previous British survey Great British Class Survey, which was supported by the local broadcasting station BBC. Identified class division is based on three types of capital, as defined many years ago by a French sociologist Pierre Bourdieu:

Economic capital involves a regular monthly income a man has available to meet his needs as well as property he can use. This category includes for example an ownership of property suitable for living.

Social capital or social connections. The authors distinguish social connections in own social group (e.g. workplace or in neighbourhood) and social connections outside of own social group (e.g. a case of a worker who knows a doctor or a lawyer well enough to be able to ask him for a favour).

Cultural and human capital involves education, ability to speak foreign languages, orientation in global issues and working with modern digital technologies.

Researchers identified the following six classes in present Czech society:

- **Secured middle class:** people of usually middle-age generation who grew up at the end of the communist season, who typically have high incomes and collected a large amount of property. Typically, those include doctors, lawyers and other educated specialists.
- **Upcoming cosmopolitan class:** most often live in big cities, grew up after November 1989 or completed most of their education in that period. Speak world languages, can work with modern technologies.
- **Traditional working class:** usually work manually as manual workers or workmen. They live in smaller municipalities, do not join in the social connections around them or with people of different classes too much (they don't know doctors, lawyers).
- **Local connections class:** have excellent contacts not only in their own social group. People live in smaller municipalities and include especially older people with lower education. Thanks to lower cost of living, they are secured quite well economically and don't have to feel to be at risk due to digitalization of labour market or by Industry 4.0.
- **Endangered class:** lower middle class with under-average income and property. They are endangered by employment as well as divorce. They work on badly-paid positions, even though their education would allow them to work in better positions. Typically,

these involve administrative workers and people employed in services. A class that does not profit from the arrival of globalisation and digitalization.

- **Suffering class:** People with minimal property, education and social connections. That often involves seniors but not exclusively. They often face execution and live in rented flat. It is typical they work in construction or in a shop as shop assistants. They do not profit from economic growth and have no resources to improve their situation.

Table 1.1 Distribution of individual classes according to individual types of capital

	Economic capital	Cultural capital	Social capital
Secured middle class	High	Average	Above average
coming cosmopolitan class	Above average	High	High
Traditional working class	Average	Under average	Under average
Class of local bonds	Average	Above average	High
Endangered class	Low	Average	Above average
Suffering class	Low	Low	Low

Compared to the mentioned British research, it is interesting that present Czech society misses almost completely one social class - elite. In Britain, this group makes about 6 % of population (less than 1 % in the Czech Republic) and typical feature is a high value of all types of capital. Czech groups in the highest positions record high ownership of one or two types of capital, however, they lack in different categories.

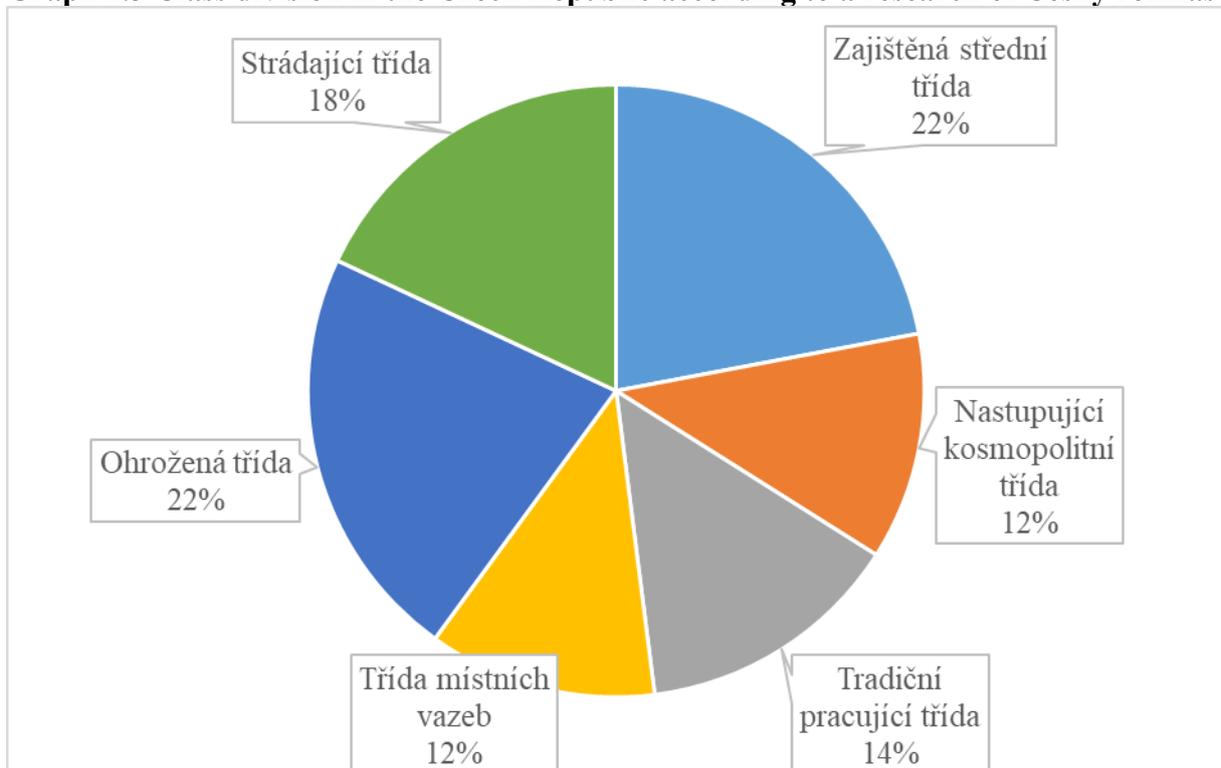
Therefore, the so-called inconsistent status is typical for them - for example those who have managed to collect economic capital haven't managed to achieve top education and language competences. People with good education and broad social connections haven't managed to put together enough economic capital

The Czech Republic has not been able to create strong enough higher class even over the 30 years of market economy.

Division of Czech society into individual classes is shown in the following graph. About a third of Czech working people is made by those who fall into either the Secured middle class or the upcoming cosmopolitan class. This group faces the lowest risk related to social changes and prospective economic crisis, it shall not be at risk when the Industry 4.0 comes.

About a quarter of Czech society is formed by the classes of Working traditionally and Local bonds. On one hand, those classes currently function without bigger problems, especially due to low cost of living. However, they are sensitive to a change of social and economic situation and new possibilities connected with globalization, Czech Republic joining the EU or arrival of digital technologies they are not able to use.

Graph 1.3 Class division in the Czech Republic according to a research of Český rozhlas



Source: Český rozhlas

Explanation: light blue – secured middle class, orange – upcoming cosmopolitan class, grey – traditional working class, yellow – traditional local connections, darker blue – endangered class, green – suffering class

It is alarming that 40 % of the Czechs fall into the Endangered or even Suffering class. The classes already feel a disfavour of destiny in the broadest sense in present time of good economic conditions. Considering economic side, they face poverty and executions. As for the social situation, they do not understand present time, they cannot orientate in new challenges and cannot use new opportunities. Geographically, they cluster in excluded locations or poor regions. At the same time, they have no resources to change their situation for the better - they have inadequate property, no education or knowledge of languages, nor broad social connections. Their exclusion is then obviously transferred to their children.

1.5 Educational inequalities and educational reproduction of society

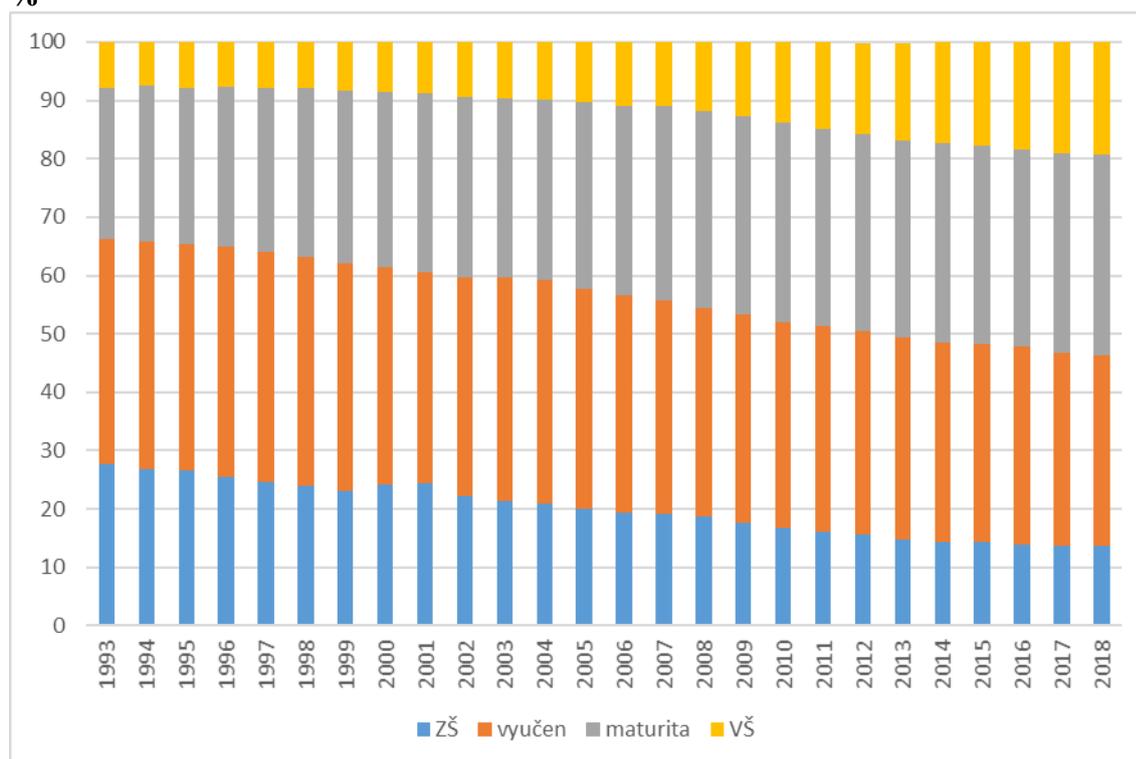
A great source of society polarization is not only a position of individual people on labour market but also their age, gender and education. Division of Czech society according to the first two characteristics remains almost unchanged in a short-term as well as medium-term horizon. The society grows slightly older, average age between 1989 and 2018 increased from 36,1 to 42,3 years (but between 2009 and 2018 only from 40,6 to 42,3 years). This is caused especially by a higher hope of surviving, which increased from 1989 to 2018 from 68 to 76 years from men to 76 to 82 years for women. Because of the higher hope of survival, there is slightly more women in society, however, their share still moves around 51 %. Regarding gender, there should no longer be any new society polarization and only very slight from the viewpoint of age (ČSÚ 2019).

However, it is different with education. Throughout the whole 20th century, average education of Czech society grew slowly. After the WW2, there was an expansion of secondary education and for the first time in history, women began to join in (for more details about feminisation of different types of education, see DiPrete, Buchmann 2013). A proportion of people with secondary education (with and without maturita examination) grew significantly, the group of people who finished on a primary education level went emptier.

Access to university education was limited by political barriers as well as low capacity of universities for a long time. Even after changes of social situation in November 1989, no significant increase in a number of university students occurred. Czech society had to wait for a fundamental change for ten more years, precisely until 2000, when the so-called Bologna declaration was accepted.

Besides many other steps to create some joint European education space, it recommended to the signing countries to divide the prior five-year study programmes into three-year Bachelor programmes and two-year Master degrees.

Graph 1.4 Development of education structure of Czech society according to VŠPS, 1993 to 2018, %



Source: ČSÚ, Blue – elementary, orange – apprenticeship, grey – maturita, yellow - university

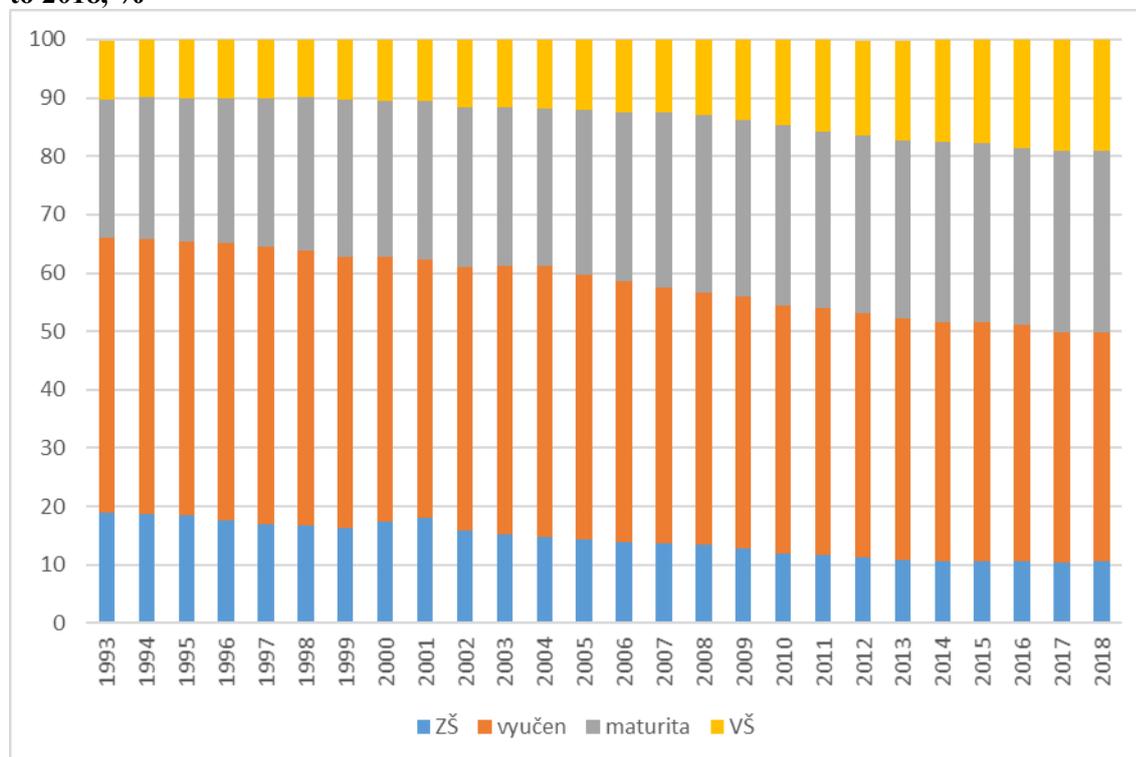
For Bachelor’s degree, lower difficulty was considered right from the beginning for students as well as universities in terms of required material as well as personal equipment. Master’s degree should be optional, there should be only a part of Bachelor graduates accepted to that. Just the introduction of Bachelor study programmes made it possible to increase a number of newly accepted students to the existing universities. Besides that, new universities appeared, which did not aspire to establish elite Master’s degrees, and from the beginning, they declared their interconnection with practise and limitation of their offer to bachelor study programmes.

The Czech Republic currently has a higher proportion of women with university education than men.

Graphs 1.4, 1.5 and 1.6 clearly show that the group of university graduates has been growing to the detriment of the groups with the lowest education. Whereas the proportion of people with maturita examination slightly increased (from 30 % in 2000 to 34 % in 2018), which is for men (from 26,7 % to 31,1 %) as well as women (from 33,1 % to 37,5 %), proportion of people with elementary education sharply fell from 24,1 % to 13,7 % and the proportion of those with

apprenticeship from 37,3 % to 32,6 %. There is an overall educational shift of Czech society upwards - groups of people who previously ended with elementary education or apprenticeship and who now complete maturita, and those who previously ended their education after secondary school and who graduate from university more often than before.

Graph 1.5 Development of education structure of Czech society according to VŠPS – men, 1993 to 2018, %

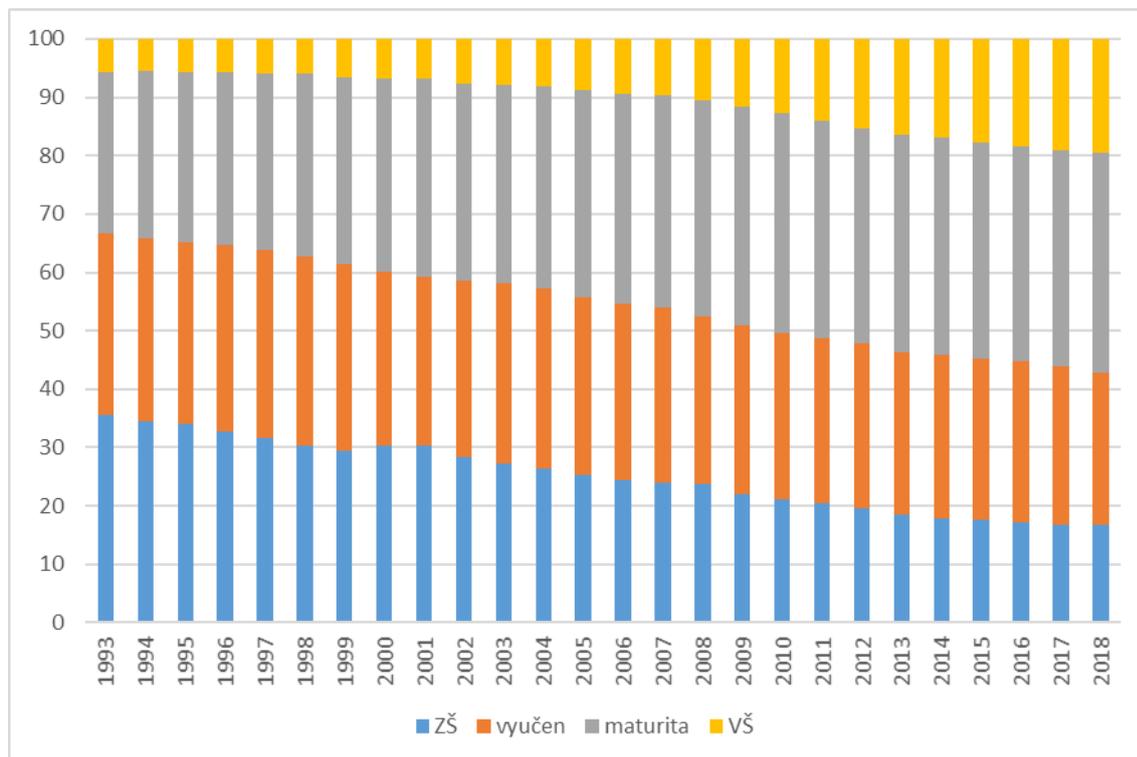


Source: ČSÚ, Blue – elementary, orange – apprenticeship, grey – maturita, yellow - university

A problem, which still remains, is educational unevenness between men and women, especially in the lowest degrees of educational system. As for a number of university graduates, women were before men years ago, and Czech population now has 19,6 % of women as university graduates and only 19,1 % man who are university graduates (the difference is even more significant, if we count just men and women in active age).

Women also do better in the group of those with secondary education – in 2018, Czech population had 37,5 % with complete secondary education and just 31,1 % of men with secondary education. It seems that women, more often than men, go to secondary schools with maturita examination, which is confirmed by the fact that Czech statistical institute records 26,2 % of qualified women but 39,2 % qualified men. The proportion of women with elementary education fell between 2000 and 2018 from 30,4 % to 16,6 %, but women still have a higher proportion compared to men with elementary education (10,5 % in 2018, 17,4 % in 2000).

Graph 1.6 Development of education structure of Czech society according to VŠPS – women, 1993 to 2018, %



Source: ČSÚ, Blue – elementary, orange – apprenticeship, grey – maturita, yellow - university

Gradual increase proportion of university graduates may be expected in near future. Although the education expansion ended approximately in 2008, a proportion of people with maturita entering universities settled on steady figures. Besides that, there is a gradual exchange of cohorts - the older and less educated groups of employees leave the labour market and they are replaced by the young cohorts with higher education besides other things.

2. Reproduction of educational inequalities

It becomes apparent from the social scientific researches that even today, parents significantly influence next steps of their offsprings. It is usually unintended influencing parents are not able to recognize or influence in any way. The outcome is apparent, the child does not have equal changes to get good quality education depending on what family s/he was born into. Achieved education then influences his later move on labour market.

2.1 Educational reproduction

Even in the 1960s, sociologists discovered an existence of the so-called basic socially stratification triangle. It is a triangle with three tops:

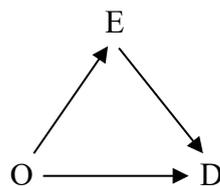
- O - origin, social origin, operational e.g. by education or parents' property
- E - education, education achieved by an offspring
- D - destination, social status an offspring achieved on labour market

There are three bonds in the social stratification chopper:

- OE - a bond between a social origin and achieved education It was assumed that as the education expansion continues the bond would go weaker, therefore the influence of parents in their offspring's education would go weaker. Thanks to a higher number of available places on secondary schools and universities, more students can study based on just their skills, not on their social status. It showed the argument was valid only with certain limitations (see below).
- ED - a bond between achieved education and a position obtained on labour market It is expected that in a modern society, it is in an interest of an employer to employ the best quality workers. And so, a level of deserving is growing (meritocracy). People get good jobs based on their skills; the ED bond should therefore go stronger. Not even that assumption proved without some limitations.
- OD - a bond between a social origin and a position obtained on labour market It was expected that the bond would go weaker due to increasing meritocracy in society. People should get good work as a result of their abilities (ED bond), not on a basis of connections and an influence of parents. The OD bond should have gone weaker, which has not been proved.

Parents therefore influence a social position of their offsprings directly (the OD bond) as well as through education (OE-ED). Both of the influences should have gone weaker in modern time considering the education expansion, and nearly vanish. It did not happen absolutely for any of the influences. Carrying the characteristics from a parent over to a child is called social reproduction across generations. Depending on which characteristic is carried over, we can speak about educational reproduction or about status reproduction.

Picture 2.1 Basic socially stratificational triangle



The EBM theory (education based meritocracy) assumed that the meritocratic society would value only skills, therefore employers would choose employees only according to their qualification, therefore the only connection that would make sense was going to be the ED connection (Bernardi, Ballarino 2016).

However, the theory has been empirically proven wrong; education is not the only characteristic important when giving job position. An alternative, a little weaker EGE theory (education as a great equalizer) therefore assumes that education at least decreases inequalities caused by social origin (Bernardi, Ballarino 2016). Especially higher degrees of education have greater influence compared to social status in getting employment. Although a part of the inequalities still appears through the already described OE connection, a direct influence of a social origin (OD connection) should be going down according to EGE.

Bernardi a Ballarino (2016), however, found that a direct influence of social status still exists. With transition from an industrial society to the post-industrial one, labour market begins to value different skills and knowledge compared to what is considered important by education system. Instead of hard photographic knowledge (hard knowledges), it is more about soft skills (soft skills). Those are adopted by upbringing in a family, rather than being learnt in education system. It is for example strong-mindedness, ability to break through or similar.

2.2 Why reproduction occurs

Sociologists have identified a whole range of reasons of the education reproduction across generations. They can be divided into the following large groups:

- **Communication skills of children:** according to Pierre Bourdieu, it's especially a cultural capital of a family. Children who come from families with a high culture capital, they visit museums and galleries from young age. Later, they enter a school system and meet teachers with similarly high culture capital. Children are then able to communicate with the teachers much more effectively, which the teachers wrongly take for a sign of intelligence, and they reward them by better marks.

Alternative explanation of Basil Bernstein speaks about limited and developed language code. Children who grew up with more educated parents have been used to expressing themselves in more developed sentences, asking questions and getting answers from an early childhood. They have the so-called developed language code. Compared to children with a limited language code, they are able to communicate better with the teachers.

- **Aspiration of parents'** families with educated parents also differ from families with less educated parents in what importance they pay to education. Tomáš Katrňák (2004) carried out a research among families of those with university education and families of workers and found out children were constantly told about an importance of education in the families of university graduates. Parents care about what is happening at school, they do homework with children and give them adequate environment to develop their skills. They automatically assume their children will study at university.

On the other hand, parents without university education show lower educational aspiration. They are satisfied their children get an apprenticeship certificate (saying exactly that they can do a maturita anytime they like, it's important their offspring has „something“ in hand). They do not emphasize education to children, on the contrary, they often give examples of the individual failures of education system („he's an engineer and he works with a lathe“). They are not interested in what is happening at school and do not prepare to school with children. Katrňák calls children from working families „freely floating cork stoppers“, which school either takes up or wash away but they cannot stand up to the outer influences themselves.

The problematics of education reproduction across generations lies mainly in its social unfairness. Both approaches to explanation include no abilities of children, nor their intelligence. Because that is not important. Even an intelligent child, if born to a „bad“ family, has a much worse chance to achieve higher education. On the other hand, even a less intelligent child born to a family that pays enough emphasis to education has an easier way to higher education.

The influence of social origin goes weaker in case of the higher education levels - it is lower for university studies compared to the secondary ones. A problem of Czech education is that from the very beginning, it is really selective and multitrack. After five years in education, children are divided to elite eight-year grammar schools or standard primary schools. After nine years in education, they continue in apprenticeship programmes that constitute a blind track and don't easily allow to continue in studies, or at secondary schools of different types and levels which determine their future destiny to a great extent.

2.3 Data used: European research of values

To obtain statistical analyses in this chapter, we have used data from the selective investigation European Values Survey (European research of values, EVS). It is an international investigation with a history from 1981, when there was its first wave in then the western European countries. The second wave, involving post-communist countries, took place in 1991. The third wave involving other countries took place in 1997, the fourth wave in 2008 and the fifth one, which was the last so far, took place in 2017.

The Czech Republic, respectively Czechoslovakia, participated in the last four waves of EVS investigation. Data are therefore available for 1991, 1997, 2008 and 2017. Collecting data on Czech level is provided for by the Faculty of Social Studies of Masaryk University. Data are later internationally harmonized and published for academic and educational purposes.

Data file contains, besides basic socio-demographic information about respondents (such as age, gender, education, address, religion and other), also variables concerning their positions and opinions in different areas. There are common questions concerning social distance (which groups of people a respondent wouldn't like to have as neighbours), post-materialism, characteristics of a good job, role of men and women and others. (For more details about the variable of values depended on various characteristics of a respondent, see chapter 4).

We have used only data from the fifth wave for the analysis. Those are the latest data available, which, in addition to that, are the only ones out of all five waves include information about education of respondent's parents, so they are the most suitable ones to study education reproduction across generations. There were respondents below 18 as well as respondents above 65 were removed from the file. At the end, the data file included only the respondents who are the most likely to move around the labour market. The file contained 1 224 respondents in total, which involved 40 % men and 60 % women.

2.4 Differences in reproduction across generations

Table 2.1 shows the level of reproduction across generations within the whole data file. Considering the fact the file involves respondents who ended their education within a few decades, while the individual education stages in each time period were not fully comparable, there had to be some sort of recoding. The highest degree of respondent's education, mother as well as father, have been transferred into the following categories:

- Incomplete and elementary
- Apprenticeship without maturita exam
- Secondary with maturita examination
- University - all degrees

In educationally heterogenous families, therefore in cases when one parent had a higher level of education than the other one even after the mentioned recoding, we always took the one with higher education as the first step of the analysis. We assume it was just him who had the greatest influence on the education of offsprings in a family. (An alternative theory used for example in the book *Sentenced to manual work* (Katrňák 2004) assumes the most important one in the education of offsprings is the mother. For example in families where a father has only secondary education with apprenticeship certificate, whereas a mother has a maturita, it is the mother who influences education aspiration of children.

Table 2.1 Education reproduction in Czech society regardless gender and cohort, percentages

		Education of offsprings				
		Elementary	Apprenticeship	Maturita examination	University	Total
Educational level of parent	Elementary	29,89.	39,67.	25,54.	4,89.	100,00.
	Apprenticeship	7,39.	47,61.	36,39.	8,62.	100,00.

	Maturita examination	5,70.	20,96.	53,31.	20,04.	100,00.
	University	5,47.	5,47.	34,83.	54,23.	100,00.

Source: EVS

We can see from table 2.1 that regardless any other characteristic of respondents, educational reproduction in the Czech Republic is very strong. Only less than 5 % of children who have parents with elementary education obtains a university diploma. If an agent has at least apprenticeship certificate, his chances of graduating from university almost double (to 8,6 %), whereas a risk the child remains in the lowest educational category significantly decreases (from 30 % to 7,4 %).

Presence of educational reproduction is even more obvious for more educated parents. Children from families with at least one parent has education with maturita have almost 75 % chance to achieve at least maturita education, and 20% are likely to achieve even university education. Children from families with university education have more than 50 percent chance to also graduate from university, and it's almost 90% likely they will not have lower education than maturita.

The second table 2.2 indicates how parents pass their educational status onto sons and daughters. Education strategy of families was, for the most of the 20th century, different for male and female offsprings (for more information, see DiPrete, Buchman 2011). That was due to social unevenness concerning gender, due to which daughters were expected to fulfil their role at home rather than in paid job. There was also an influence of economic reasons, when having limited resources a family had available for their offsprings' education, male offsprings got preferred, as there was a higher chance they would get a well-paid job and the investment their families put into education would pay off.

Table 2.2 confirms that prerequisite to a great extent. Daughters from families with parents who have only primary education end up with primary education, too, more often than sons. While the family mobilizes all its resources to bring their son at least to successful apprenticeship, they do not care too much about their daughter's education, it seems. Similar inequalities based on offspring gender can be found even in the group of families with parents who gained apprenticeship. Daughters from those families achieve secondary education with maturita examination slightly more often but more often they end up with only elementary education.

Sons again copy their parents' level of education significantly more often and they practically never remain just on the level of completed elementary education.

There is a completely different situation in families with at least one parent with secondary education with matura exam or with university. Those families do not discriminate their daughters in terms of education, and we can say that daughters from the families gain matura or university education just like sons.

Table 2.2 Education reproduction in Czech society according to gender, percentages

		Education of son				
		Elementary	Apprenticeship	Matura examination	University	Total
of Education parents	Elementary	16,88.	57,14.	20,78.	5,19.	100.
	Apprenticeship	2,90.	55,80.	32,25.	9,06.	100.
	Matura exam	6,67.	25,24.	49,52.	18,57.	100.
	University	6,86.	5,88.	32,35.	54,90.	100.
		Education of daughter				
		Elementary	Apprenticeship	Matura examination	University	Total
of Education parents	Elementary	39,25.	27,10.	28,97.	4,67.	100.
	Apprenticeship	10,11.	42,64.	38,90.	8,35.	100.
	Matura examination	5,09.	18,26.	55,69.	20,96.	100.
	University	4,04.	5,05.	37,37.	53,54.	100.

Source: EVS

Another prerequisite is a different educational reproduction based on education of individual parents. It is assumed that a father as an example influences a son more, whereas a mother influences a daughter more in terms of her education. A relation of education of a father and mother and son and daughter is described in table 2.3 and also in graph 2.1.

The category of parents with only elementary education prefers for a male offspring to achieve at least apprenticeship (60 % for father, 54 % for mother). There is a slightly lower pressure on apprenticeship for daughter (32 % for father, 35 % for mother). It does not seem that a pressure for higher education would differ according to gender of a parent and gender of an offspring,

in other words, not even mothers with elementary education prefer higher education of daughters to higher education of sons.

Table 2.3 Educational reproduction in Czech society according to age of parent and gender of respondent, %

	Education of son					
	Elementary	Apprenticeship	Maturita examination	University	Total	
Education of father	Elementary	13,40.	59,79.	21,65.	5,15.	100,00.
	Apprenticeship	3,85.	49,36.	33,97.	12,82.	100,00.
	Maturita examination	7,57.	23,24.	50,27.	18,92.	100,00.
	University	4,11.	5,48.	30,14.	60,27.	100,00.
	Education of daughter					
	Elementary	Apprenticeship	Maturita examination	University	Total	
	Elementary	33,08.	31,54.	28,46.	6,92.	100,00.
	Apprenticeship	9,59.	37,22.	41,17.	12,03.	100,00.
	Maturita examination	4,74.	19,34.	56,20.	19,71.	100,00.
	University	4,11.	5,48.	35,62.	54,79.	100,00.
Education of mother	Education of son					
	Elementary	Apprenticeship	Maturita examination	University	Total	
	Elementary	10,73.	54,24.	24,86.	10,17.	100,00.
	Apprenticeship	2,36.	50,79.	36,61.	10,24.	100,00.
	Maturita examination	6,91.	19,15.	50,00.	23,94.	100,00.
	University	7,94.	3,17.	28,57.	60,32.	100,00.
	Education of daughter					
	Elementary	Apprenticeship	Maturita examination	University	Total	
	Elementary	25,72.	34,78.	32,97.	6,52.	100,00.
	Apprenticeship	7,06.	38,72.	44,87.	9,34.	100,00.
Maturita examination	5,26.	13,53.	51,88.	29,32.	100,00.	
University	3,51.	1,75.	40,35.	54,39.	100,00.	

Source: EVS

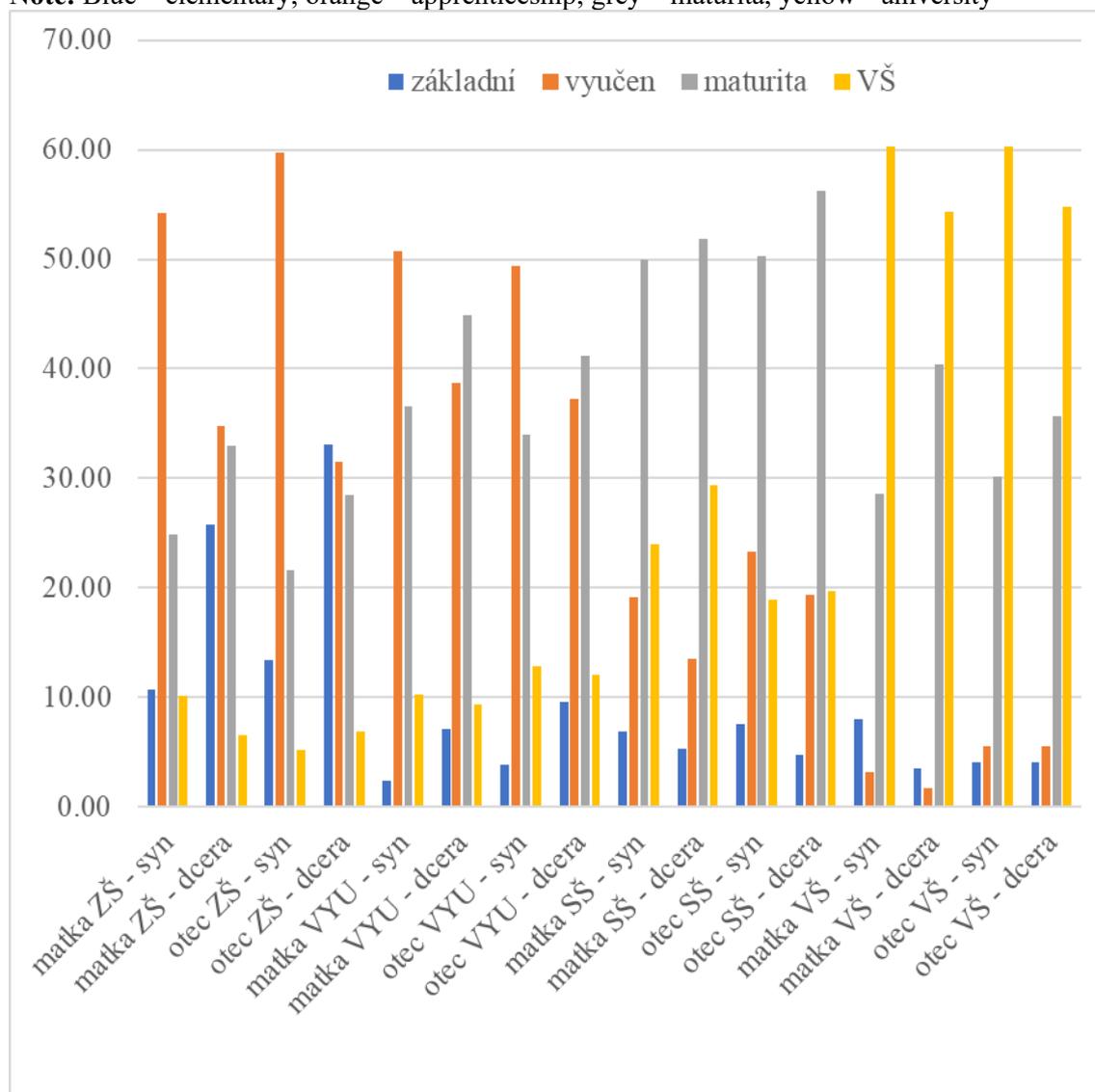
In the category of parents with an apprenticeship certificate, there are no significant differences within educational reproduction of offsprings to apprenticeship course. Mothers as well as fathers with apprenticeship certificate influence their sons and daughters in a similar way. But there is a clear difference when looking into higher education of offsprings. Both parents try for their offspring to achieve secondary education with maturita exam, a little more if it is a daughter. Mothers are a bit more forthcoming to their daughters in this (45 % vs. 41 % in case of fathers). It is, however, important to say that in the families of parents with apprenticeship,

mothers are generally more ambitious regarding education, their pressure is stronger even in case of their sons (37 % mothers vs. 34 % fathers).

In the category of parents with secondary education with maturita exam, there is again a clear connection between mother and daughter. It is daughters of mothers with secondary education who, more often than their brothers, complete secondary education with maturita or even get a university diploma. In case of fathers with secondary education, the situation of university educated offsprings is quite equal. Daughters more often than sons achieve secondary education with maturita; fathers with maturita are more often satisfied just with apprenticeship of their sons.

Graph 2.1: Educational reproduction in Czech society according to parent gender and respondent's gender, %.

Note: Blue – elementary, orange – apprenticeship, grey – maturita, yellow - university



Source: EVS

Explanation – from left to right: mother elementary – son, mother elementary – daughter, father elementary – son, father elementary – daughter, mother apprenticeship – son, mother apprenticeship – daughter, father apprenticeship – son, father apprenticeship – daughter, mother secondary – son, mother secondary – daughter, father secondary – son, father secondary – daughter, mother university – son, mother university – daughter, father university – son, father university – daughter

In the category of families with university education, the chances of sons and daughters are more less equal. There is a minor difference in case of secondary education, which is achieved by daughters more often than sons regardless whether there is a university educated father or mother. But this is caused by educational expansion which has only recently turned gender gap in education around, therefore there were a significantly greater number of female students entering universities than before. The following analysis according to a year of birth sweeps away the difference between sons and daughters and their access to university education.

2.5 Educational expansion as a solution

Inequalities in the approach to higher education should have weakened education expansion to a great extent. It was logically assumed that if education (firstly on secondary level and then on university level) would become available to more people, there will be not only offsprings of very educated parents entering the university, which is only a limited number, but there will also be other groups of people.

The first educational revolution involved making accessible a sufficient number of places on an elementary education level. In Czech countries, it took part in the 19th and 20th centuries and was connected with an implementation of compulsory education and removing illiteracy. Its consequences can no longer be analysed in present data files.

The second education revolution concerned secondary education, which involves education in apprenticeship programmes as well as secondary education with maturita. As for time, the second education revolution can be dated somewhere to the second half of 20th century. Its reference is still slightly clear in dates (see Katrňák, Simonová, Fónadová 2013).

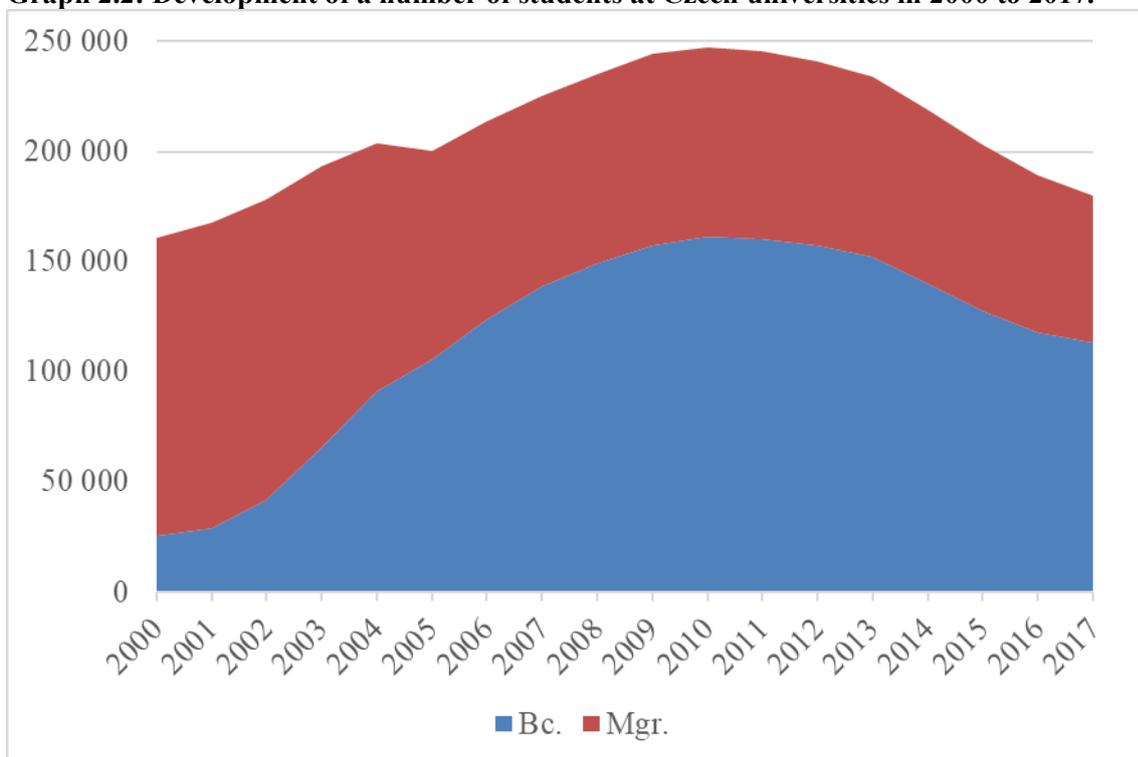
The latest one, considering time, is the third education revolution concerning a significant increase in a number of university students. In European countries, it ran from 2000, when the Bolognese declaration was accepted, and continued until 2009. After that, the increase in a number of university students stops, and considering a decline of a demographic line, the number of students is likely to decrease in near future.

Graph 2.2 indicates how a number of university students changed from 2000, when the Bolognese declaration was accepted. It is clear from the graph that until then, the minority

Bachelor studies started to develop very quickly, and a number of the studying Bachelor students is significantly higher than a number of the studying Masters. On the other hand, there was no dramatic decrease in the Master education, as originally expected after accepting the Bologna declaration. It seems that Czech university education kept its pre-Bologna master's degree education almost without changes (in terms of capacity at least) and just much more accessible Bachelor's degrees have been added. University expansion in the Czech Republic is, according to the findings, especially in the Bachelor study programmes.

It is also clear from the graph that the expansion ended around 2009. If we should measure the expansion by numbers or a proportion of those with maturity who applied for university education, the expansion would have taken place approximately a year or two earlier. In any case, a number of university students has been decreasing in accordance with the decline of demographic curve.

Graph 2.2: Development of a number of students at Czech universities in 2000 to 2017.



Source: MŠMT (2018)

A frequent argument in public debates is a fact that students choose easier economic-management and humanite-social study programmes rather than the more difficult ones (and the only ones available before) - technical-natural sciences.

As the graph 2.3 indicates, in 2007 to 2017, there really was a slight decrease in the number of those studying the natural-science and technical programmes (in absolute numbers, from about 109 thousand to 93 thousand). However, there was a similar decrease in other field groups, too (e.g. humanite social sciences: from 54 thousand down to 50 thousand, economic sciences: from 81 thousand down to 61 thousand, pedagogy from 46 thousand down to 32 thousand and similar). Therefore, it seems that a decrease in the individual fields is caused by a decrease in a number of students rather than by parasitizing of one group of programmes on another one. Also, other analyses (Doseděl 2009) indicate a number of students in technical programmes has remained more less the same since 2009 and the whole education expansion was based mainly on the social sciences, humanite and economic programmes that were artificially held in low numbers before.

Therefore, graph 2.4 is more interesting and it shows how a relative proportion of students in a given programme group changes. In this view, the is already - the media often present it as dramatic - a decreased interest in technical programmes of much less importance. Between 2007 and 2017, a number of students in technical and natural science programmes decreased only from 31,03 % to 30,68 % (only for technical fields, the decrease was from 23,46 % to 21,58 %, but due to introduction of some marginal fields, such as biochemistry, is disputable, it is better to look at the total of both groups).

Proportion of those studying humanite and social scientific fields grew in the given time period from 15,32 % to 16,63 %, which was balanced by a decrease in the share of students of economic fields from 23,11 % to 20,00 %. It is interesting to see a quite big increase in medical programmes (from 7,24 % to 10,25 %), which is probably caused by a bureaucratic change – even the middle medical staff, such as nurses, midwives or emergency staff, need to have university education now.

Graphs 2.5 and 2.6 indicate a number, respectively a proportion of graduates according to individual groups of studied fields. It is often said especially about technical programmes that it is not so hard to be accepted for the study programme but it is hard to complete it, as a level of students' mortality is too high compared to other groups of programmes.

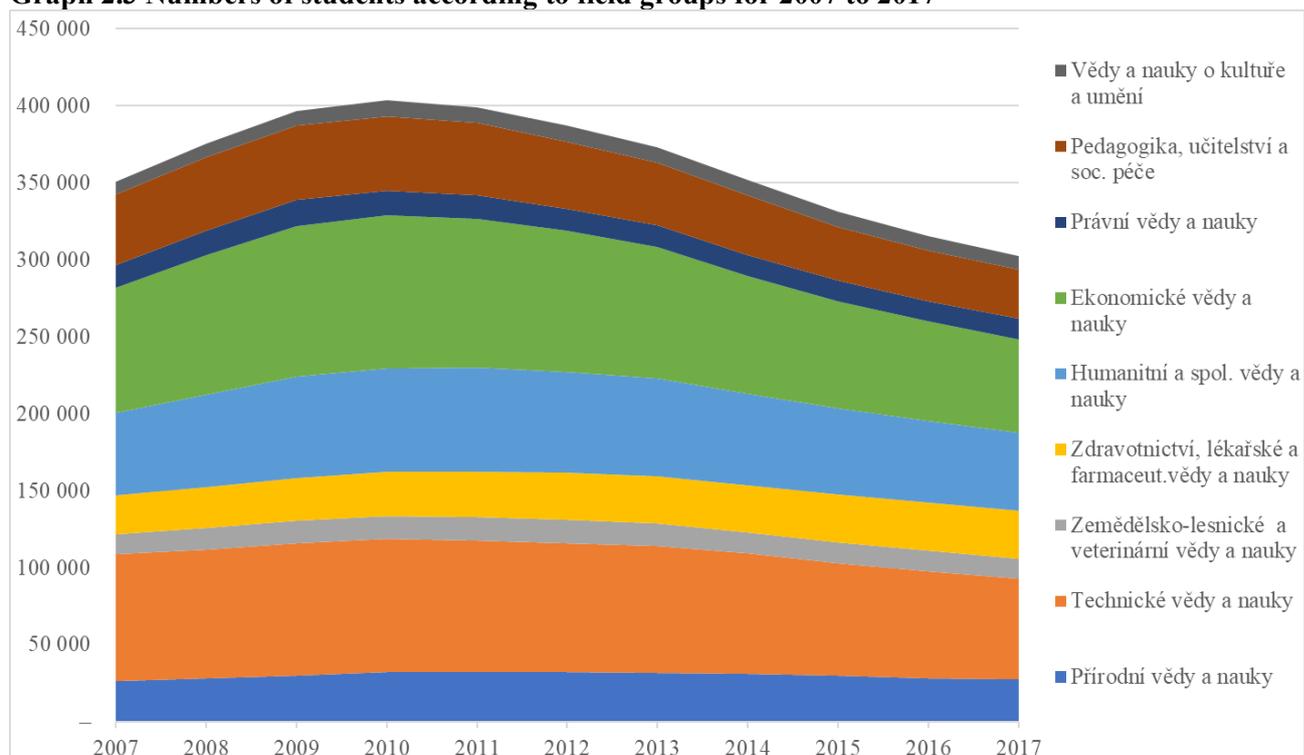
From this viewpoint, technical and natural science programmes got better now. Number of graduates grew in the monitored time period from 20 530 to 21 857. In relative view, it means a slight decrease from 32,08 % to 30,28 %. Humanite, social and economic sciences recorded,

in an absolute view, an interesting increase from 24 286 graduates in 2007 to 28 523 graduates in 2017. In a relative view, the growth is not so dramatic anymore, from 37,95 % to 39,51 %.

The following can be said at least on the level of university education:

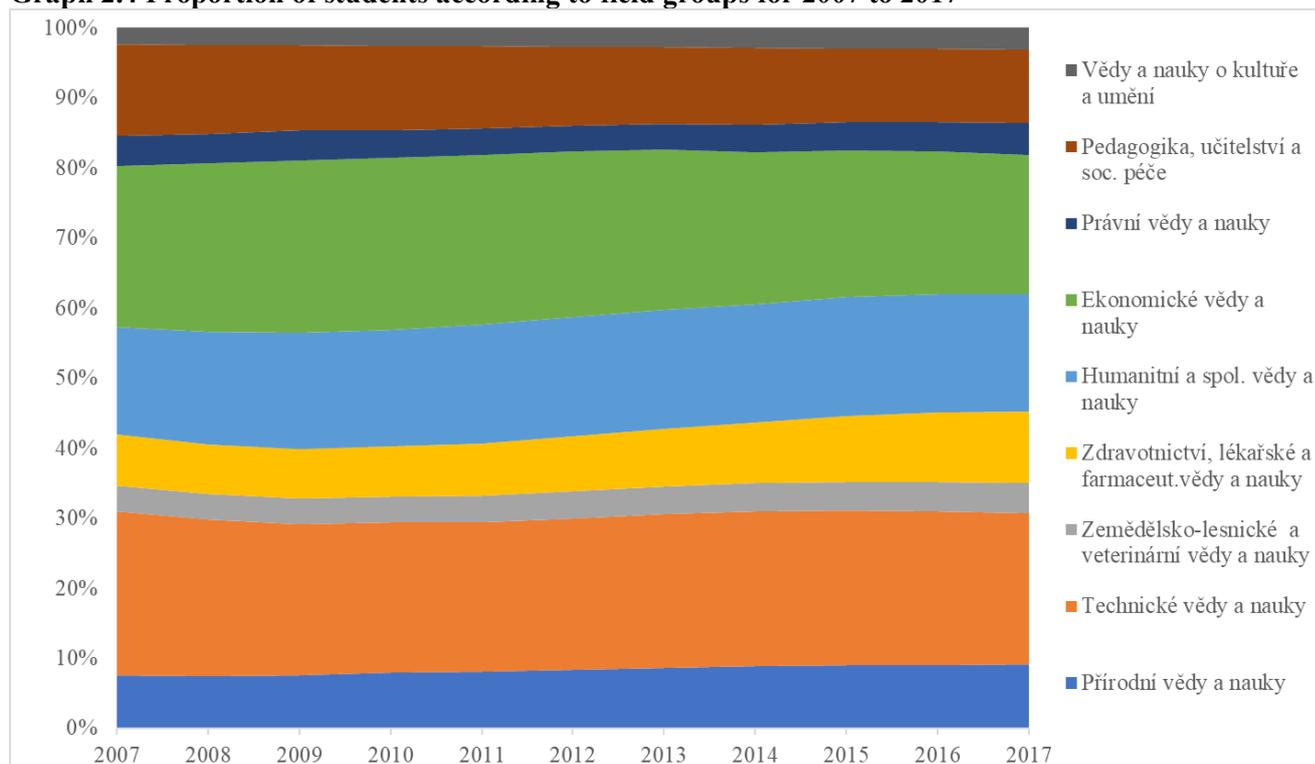
- A proportion of students and graduates of technical and natural science subjects has not been decreasing dramatically.
- Educational expansion was based mainly on (economically less demanding) humanite, social science and economic programmes.
- Medical fields develop the most.

Graph 2.3 Numbers of students according to field groups for 2007 to 2017



Source: MŠMT (2018)

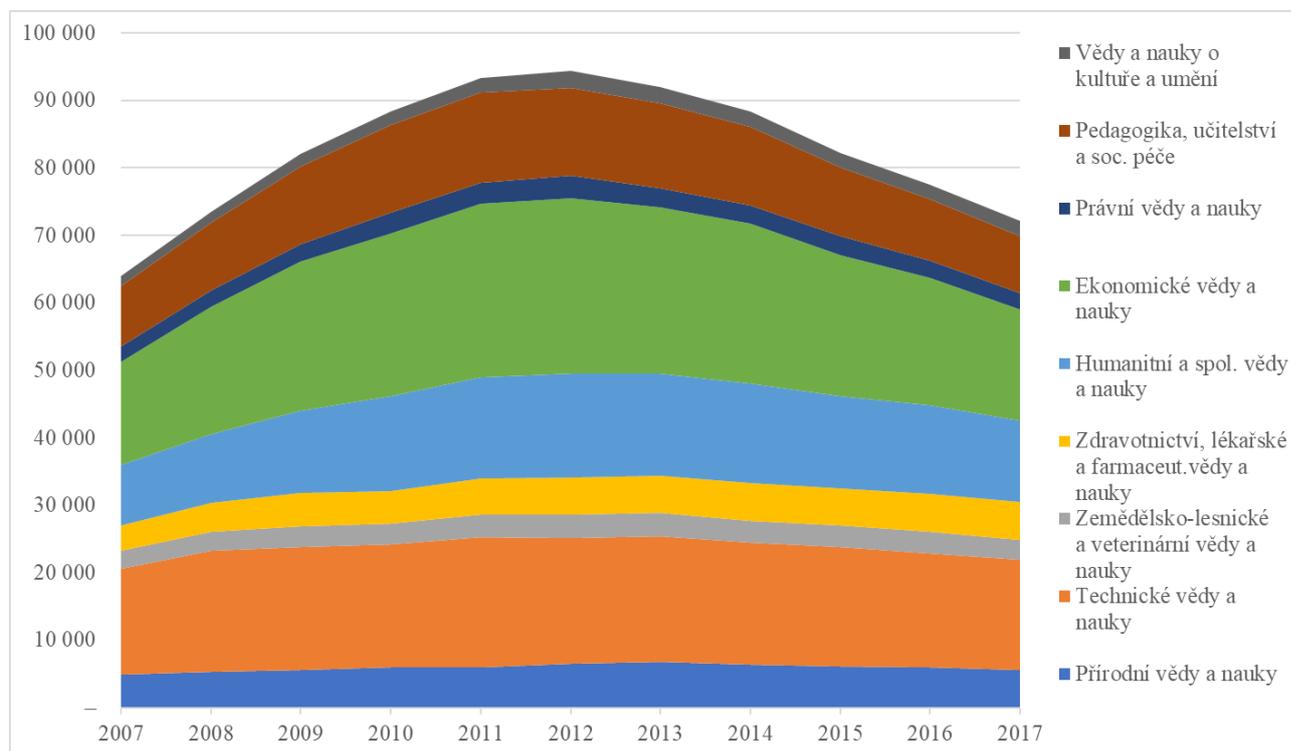
Graph 2.4 Proportion of students according to field groups for 2007 to 2017



Source: MŠMT (2018)

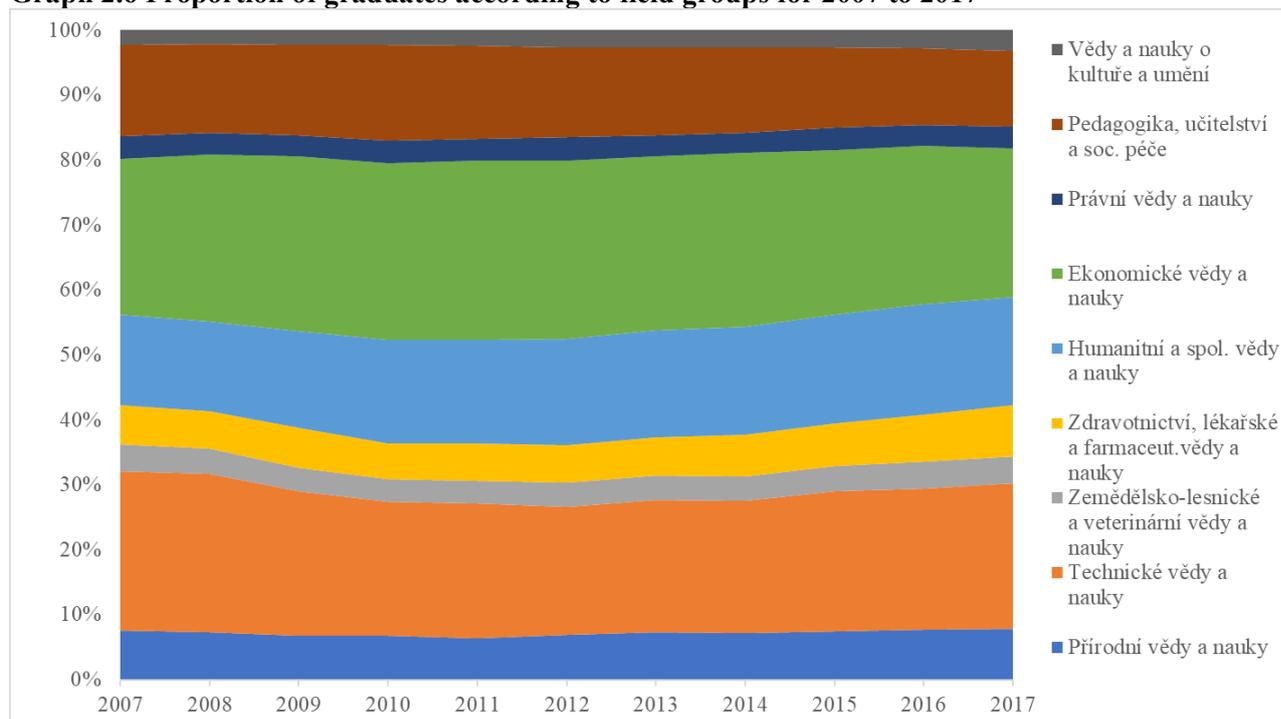
Notes for the graphs above and below – from black down to blue: art and culture sciences; pedagogy, teaching and social care; legal sciences, humanite and social sciences; medicine, medical and pharmaceutical sciences; agriculture and forestry and veterinary sciences, technical sciences, natural sciences

Graph 2.5 Number of graduates according to field groups for 2007 to 2017



Source: MŠMT (2018)

Graph 2.6 Proportion of graduates according to field groups for 2007 to 2017



Source: MŠMT (2018)

Let's now have a look at data from the European research of values EVS to find out how a level of education reproduction across generations changes in relation to education expansion. As already said, social scientists usually assume that opening some education degree to a larger number of people means that not only families with better educated parents are satisfied in terms of their education ambitions but gradually also other education groups.

To verify the assumption, we divided the RVS research respondents into age groups in order to record changes in education reproduction during time. It involves the following age groups:

- 25 - 30 years: fresh school graduates, studied during culminating education expansion
- 31 - 40 years: studied during education expansion or just before
- 41 - 50 years: studied before education expansion but usually after November 1989
- 51 - 65 years: studied before November 1989

Table 2.4 indicates how education reproduction across generations functions in relation to respondent's age, and now classified according to parents' education on the first level. (Again, more important was education of that parent, who reached a higher level of education.).

The first socially negative finding can be found on a level of parents with elementary education. Reproduction across generations strengthens significantly in time on this level. Whereas for older respondents (that is in previous time periods), there was about one fifth chance to complete secondary education and at least a symbolic (3 %, resp. 8 %) chance to complete university education, the possibilities cease in the youngest cohorts. A generation of the so-called millennial copies elementary education of their parents, their maximum in an apprenticeship certificate.

There is a much more positive situation in families with parents who have an apprenticeship certificate. A risk that a child falls to a lower degree of education, so s/he only completes elementary education, had no continual trend, and it makes about nine percent in the youngest generation. A proportion of children who take over the education level of their parents gradually decreased by from about a half to about a third in the youngest generation. On the other hand, a proportion of children who - though they have parents only with apprenticeship - graduate from university. Such offsprings currently form about one fifth, however, five years ago, a proportion of university educated offsprings of parents with apprenticeship didn't even reach 10 percent. In this respect, a positive influence of education expansion is clear.

Offsprings of parents with secondary education with maturita exam are at about a quarter of a risk to experience education fall. The risk slightly decreases over time – from 28 % to current 18 %. Another about a half of offsprings (currently 48 %, but previously 56–58 %) gets the same level of education as their parents, therefore secondary education with maturita exam. A growing number of offsprings achieves higher education, therefore the university one (currently 34 %, 25 %, 19 % and 16 % in previous generations).

Offsprings of the university educated parents have almost one hundred percent security they will not remain just with elementary education. Compared to the situation before November 1989 or close after, they are not likely to end up with just an apprenticeship certificate. About a third of offsprings of the university graduates (28–30 % without a clear trend or some big changes) complete maturita education, the rest completes university education. The proportion of offsprings of the parents with university education, who also graduate from university, moves around 60–65 %.

Table 2.4 Educational reproduction in Czech society according to respondent's age, %

	Parent: elementary				
	Education of an offspring				
	Elementary	Apprenticeship	Maturita examination	University	Total
25 to 30 years	33,33.	66,67.	0,00.	0,00.	100,00.
31 to 40 years	30,77.	46,15.	23,08.	0,00.	100,00.
41 to 50 years	50,00.	16,67.	25,00.	8,33.	100,00.
51 to 65 years	23,68.	52,63.	21,05.	2,63.	100,00.
	Parent: apprenticeship				
	Education of an offspring				
	Elementary	Apprenticeship	Maturita examination	University	Total
25 to 30 years	9,09.	29,55.	40,91.	20,45.	100,00.
31 to 40 years	5,32.	44,68.	43,62.	6,38.	100,00.
41 to 50 years	2,26.	51,88.	36,84.	9,02.	100,00.

51 to 65 years	8,25.	51,94.	32,04.	7,77.	100,00.
	Parent: maturita examination				
	Education of an offspring				
	Elementary	Apprenticeship	Maturita examination	University	Total
25 to 30 years	6,00.	12,00.	48,00.	34,00.	100,00.
31 to 40 years	2,73.	15,45.	56,36.	25,45.	100,00.
41 to 50 years	0,00.	23,39.	58,06.	18,55.	100,00.
51 to 65 years	0,80.	27,20.	56,00.	16,00.	100,00.
	Parent: University				
	Education of an offspring				
	Elementary	Apprenticeship	Maturita examination	University	Total
25 to 30 years	0,00.	3,45.	31,03.	65,52.	100,00.
31 to 40 years	0,00.	3,51.	28,07.	68,42.	100,00.
41 to 50 years	3,85.	11,54.	26,92.	57,69.	100,00.
51 to 65 years	0,00.	11,43.	28,57.	60,00.	100,00.

Source: EVS

There are the following conclusions that may be ensued from the findings:

- Differences between education reproduction from father or mother to a son or a daughter are rather partial and usually of not great significance.
- On a level of parents with elementary education, higher education (that is apprenticeship) is preferred for sons rather than daughters.
- In families with parents who have apprenticeship, daughters more often than sons complete maturita education, but daughters also end up just with elementary education more often than sons.
- The families with more educated parents, no preference of gender can be seen.

- Children who are born to the families of parents with elementary education are de facto caught in an education trap they cannot leave. It is impossible for them to get better education than apprenticeship in the current education system.
- Children of parents with higher education (apprenticeship, matura, university) complete university education more often than before.
- A risk of falling into lower education level decreases in the course of time.
- The higher education the parents achieved, the higher chance of higher education there is for their offsprings.

Education reproduction between parents and offsprings works in current Czech society, though its power gradually decreases due to education expansion, it seems. In spite of that, there is a deeper and deeper polarization of Czech society. Educated parents have educated children together, who do a better qualified and better paid job. Less educated parents have less educated children together, who, just like their parents, remain trapped in a trap of the less qualified and worse paid jobs.

To that, we can also add the so-called marriage or couple homogamy, according to which there is a significantly higher chance it will be people with the same level of education entering into marriage than people with different education levels. Details are indicated in Table 2.5

Table 2.5 Educational marital homogamy in Czech society, %

Education of a man	Education of a woman				
	Elementary	Apprenticeship	Maturita exam	University	Total
Elementary	81,50.	16,30.	1,76.	0,44.	100,00.
Apprenticeship	25,33.	57,91.	14,74.	2,02.	100,00.
Maturita examination	8,77.	27,63.	55,26.	8,33.	100,00.
University	2,76.	13,79.	42,07.	41,38.	100,00.

Source: EVS

It is likely for a man with elementary education that he will marry a woman with elementary education (81,50 %) or apprenticeship (16,30 %). There are really almost zero chances he will marry a woman with matura exam or university education. It is the most likely for men with apprenticeship to marry a woman with apprenticeship certificate, though there is quite a high chance they men could marry women with primary education or matura. Also, men with matura often get women with the same education (in about 55 % cases), but also women with apprenticeship, elementary education and relatively often also university graduates (8 %). The

highest chance to marry a university educated woman goes to university educated men (41 % cases), but those are also often satisfied with a secondary school graduate (42 % cases).

Thanks to marital education homogamy and education reproduction from parents to offsprings, groups of people with the same or similar and with similar chances on labour market begin to exist.

2.6 Inequalities of new type

Although it seems that education expansion decreases inequalities in the approach to education, and that more and more offsprings of parents with lower education enter the higher grades of education. However, social scientists found a new type of inequalities.

In 1993, sociologists Adrian Raftery and Michael Hout formed a theory of **maximally maintained inequality**, according to which the higher-degree schools are entered especially by children from higher classes (whether we see the higher classes as groups of the rich or families with better education). We have shown on data from Ireland that not even cancellation of tuition fees helps, nor implementing egalitarian reforms. Only at the moment education needs of higher classes are satisfied (that means all their children get to university), education needs of lower classes come forward.

This is the situation we should currently have in the Czech Republic, as we can see from the above tables. Children of university educated parents are admitted to universities in 60–65 % cases (and another about 30 % go at least to secondary school), therefore there are free places for the offsprings of parents with lower education.

This logical assumption was disproved in 2001 by Samuel Lucas, who came with a theory of effectively (or also consequently) maintained inequality. According to his findings, it is true that offsprings of the parents with lower education have an opportunity to achieve higher education (and experience forward education mobility). But they differ from their classmates from the families with higher education in an aspect that had not been assessed till then - in quality of achieved education. There is no fight to complete better education anymore but about what education it will be.

Katřák, Simonová and Fónadová (2013) illustrated that on Czech dates concerning secondary education. Getting secondary education with matura exam does not constitute a problem maybe just for offsprings of the parents with primary education, and there is a relatively small number of them, and even in their case, there is almost a quarter chance for secondary education.

It is the offsprings of parents with university or secondary education as well as offsprings of parents with apprenticeship who enter the secondary schools with maturity without bigger problems.

But there is a difference in the type of secondary school the children complete. While children from the university educated families go more often than others to elite eight-year grammar schools, children of those with apprenticeship still end in the apprenticeship programmes, integrated or specialized secondary schools to a great extent.

On a university level, it's hard to determine such clear hierarchy of schools, if compared to the secondary level (where it is clear, in backward order: eight-year grammar schools, grammar schools, specialized schools, apprenticeship schools). Despite that, there are programmes where we can find offsprings of parents with a university degree more often (e.g. law, medicine, technical programmes), and on the other hand, where there is a bigger number of offsprings of parents with secondary or lower education (social sciences, humanite sciences or pedagogy).

Due to an influence of education expansion, education inequalities decreased in their quantitative dimension - offsprings from the less educated families achieve higher levels of education compared to their parents more often than before. Despite that, the new dimension of inequalities - qualitative - remains preserved. Offsprings of parents with different education differ in what type of school or study programme they complete. This is then determining in their next movement on labour market.

3. Income inequalities

In this chapter, we will look into income inequalities according to the individual personality and other characteristics. In the first part, we will introduce the data source used, and in the following parts, we will look into income inequalities according to age and gender, according to the highest education achieved, according to territorial classification, and finally, according to a job position (manual versus non-manual workers).

3.1 Data source²

Data resource used in this chapter is an extensive structural investigation of incomes, which is, in the gestion of the Ministry of Work and Social Affairs (MPSV), contractually provided by TREXIMA, spol. s r. o.

The investigation is carried out at the places of employers, and from a side of employers, data sentences are sent for employers as well as for employees. Data sentence for employers contains the following key items³:

- Identification of an employer (company name, name, address)
- Territorial unit code
- Total accounted gross wage, and from that separately total amount of bonuses and rewards
- Total number of hours at work, hours not at work and overtime
- Average number of employees
- Other personal costs (agreements to do work) and numbers of hours at work as a part of agreements

Data sentence for employees then contains the following key items⁴:

- Unique code of natural person
- Year of birth
- Gender

² Data for this part have come from www.ispv.cz. Cit. on 9. 10. 2019.

³ Just a selection provided. Full description is available on <https://ispv.cz/getdoc/7fa806f6-292b-489b-a067-cfd4f1f22c5b/Popis-polozek-MI.aspx>. Cit. on 9. 10. 2019.

⁴ Just a selection again, full description is available on <https://ispv.cz/getdoc/6df66f3c-d04e-4dfc-96ce-9d2507cb46a8/Popis-polozek-MP.aspx>. Cit. on 9. 10. 2019.

- Nationality
- The highest education achieved
- Field of education
- Place of work
- Employment position code
- Employment classification code
- Length of employment for the employer
- Number of hours at work, hours when not at work and overtime hours (in a different classification)
- Accounted salary / wage (classified in basic salary, rewards and bonuses, compensation for working hours when not at work)
- Average income found to calculate the compensation of wages

Data are investigated separately for the wages sphere (employers remunerating employees by a wage according to § 109 par. 2 of the Labour Code **and separately for the income sphere** (employers paying salary to their employees according to § 109 par. 3 of the Labour Code).

In the wage sphere, companies are selected in a one-grade stratification selection, and selection areas (strata) are determined by the institutional sector, category size, branch group and region. Companies with 250 and more employees are investigated generally within the non-financial companies' sector and households, companies with 1 to 249 employees are investigated selectively. Selection share varies according to category size of the company from 1,2 % to 15 % (larger companies are therefore more likely to be included). In other sectors (financial, government and non-profit institutions), extent investigation goes on in companies from 50, resp. 65 employees.⁵

In the salary sphere, data are obtained generally for all employees who get a salary.

Periodicity of publishing the results in the wage sphere is quarterly, and twice a year in salary sphere. Please notice that the data from the Information system of average income cannot be directly compared with the wages statistic of the Czech Statistical Authority based on company records. **It is therefore not possible to compare the incomes from this chapter with the indicator of average wage in national economy**; this is primarily used in various documents of legislative and non-legislative nature, from values of the indicator are for example deducted

⁵ For more details see <https://www.ispv.cz/cz/Vysledky-setreni/Methodika.aspx#odst1>. Cit. from 9. 10. 2019.

minimum limits for pro medical insurance and social insurance payments from the self-employed people. In the same way, the indicator of average wage in national economy serves as one of the indicators pension valorisation depends on.

Investigation results based on ISPV make it possible to analyse incomes in the classification not only according to company characteristics but also according to personal characteristics of employees. They also allow to carry out various structural analyses including income structure (basic wage, supplements, bonuses, compensations), and opportunities to compare structures in time or intersectionally according to individual characteristics, and also allows to monitor wage differentiation.

Information about incomes (not only from employment) can be also obtained from selected investigation in households, whether it is the Selective investigation of workforce or the investigation Living conditions (within the EU-SILC investigation across Europe). Data obtained from the sources are advantageous, as they can be monitored in connection with other socio-economic-demographic indicators of a given household, on the contrary, their disadvantage is a significantly smaller range of selective file and then also non-selective error coming out of unwillingness, respectively real impossibilities, to provide data about incomes to inquirers from ČSÚ. Data based on VŠPS, respectively on the European version of this investigation, are used in the other chapters of this study.

3.2 Income inequalities according to age and gender

In all subchapters of this chapter, we will look into the sectional analyses according to the individual interpersonal characteristics. We will always look at how the individual cuts changed in time. In addition to that, we chose „critical“ year 2011, „post-critical“ year 2014 and year 2018, which falls into a period of the long-lasting strong economic growth, characterised by very low unemployment and a high interannual growth of incomes.

We will first look at the differences in wages according to age and gender in each sphere in 2011, 2014 and 2018.

Table 3.1 Average incomes in the wage sphere in 2011 according to gender and age, CZK

	men	women	total
up to 20 years	15.751.	13.304.	14.900.
20 to 29 years	22.402.	20.594.	21.695.
30 to 39 years	30.567.	22.467.	27.500.
40 to 49 years	30.904.	21.481.	26.701.
50 to 59 years	27.793.	21.484.	25.166.
60 years and more	28.681.	22.435.	27.210.
TOTAL	28.403.	21.609.	25.693.

Source: ISPV

Table 3.2 Average incomes in the wage sphere in 2014, according to gender and age, CZK

	men	women	total
up to 20 years	17.225.	14.823.	16.505.
20 to 29 years	23.062.	20.727.	22.165.
30 to 39 years	31.625.	23.895.	28.698.
40 to 49 years	32.569.	22.607.	28.077.
50 to 59 years	29.264.	22.004.	26.085.
60 years and more	29.469.	24.324.	28.218.
TOTAL	29.693.	22.545.	26.804.

Source: ISPV

Table 3.3 Average incomes in the wage sphere in 2018, according to gender and age, CZK

	men	women	total
up to 20 years	23.110.	20.902.	22.287.
20 to 29 years	29.945.	26.372.	28.567.
30 to 39 years	38.025.	29.954.	35.025.
40 to 49 years	40.508.	29.100.	35.364.
50 to 59 years	36.214.	27.463.	32.373.
60 years and more	34.745.	29.075.	33.111.
TOTAL	36.652.	28.461.	33.321.

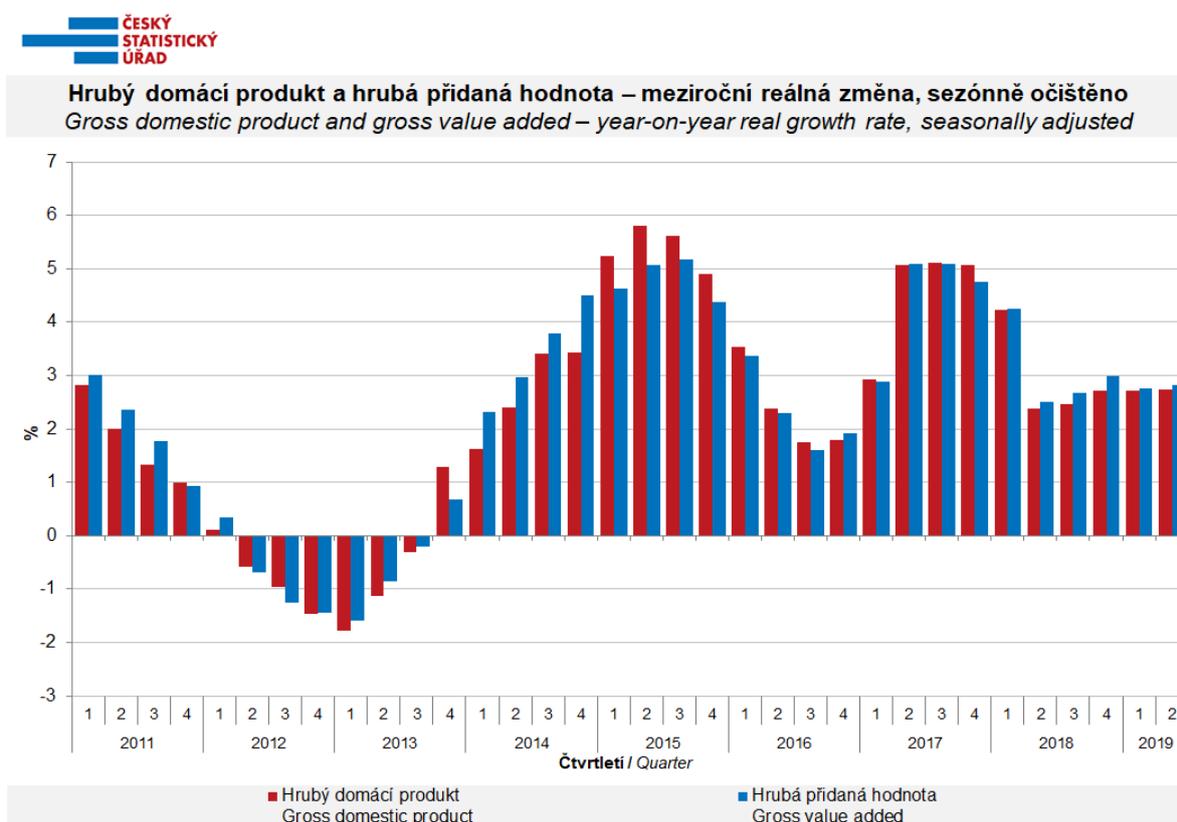
Source: ISPV

We can see in tables 3.1 to 3.3 that remuneration in the wage sphere is significantly independent on age as well as gender in all monitored years.

Concerning the age groups, the highest wages go to employees in the age groups of 30-39 and 40-49, the lowest ones go to employees in the youngest and the oldest age groups. The

differences are quite significant in some cases, when for example in 2018, average wage of a person 40–49 years old was 24 % higher compared to average wage of a person 20–29 years old and 6 % higher compared to a person 60 and more years old. At the same time, wages developed differently in different age categories: in 2011, average wage of a person 60 or more years old was higher than the one of people 40-49 years old. Generally, we can notice a significantly different character of wage and salary development in 2011 - 2014 and in 2014 - 2018. We can find an explanation in a significantly different course of economic cycle, expressed by a development of gross domestic product (Picture 1).

Picture 3.1 GDP development in 2011–2019, %



Source: ČSÚ

We can see a development of average wage in the individual age groups in table 3.4.

Table 3.4 Development of average wages in the individual age groups in the wage sphere

	2014/2011	2018/2014
up to 20 years	1,108.	1,350.
20 to 29 years	1,022.	1,289.
30 to 39 years	1,044.	1,220.
40 to 49 years	1,052.	1,260.
50 to 59 years	1,037.	1,241.
60 years and more	1,037.	1,173.
TOTAL	1,043.	1,243.

Source: ISPV, own incomes

Concerning the differences according to gender, wages of women are 8 191 CZK a month lower, which is 22,4 %. There are different results in the individual groups.

Table 3.5 Differences of average wages of men and women in 2011, 2014 and 2018

	W/M 2011	W/M 2014	W/M 2018
up to 20 years	0,845.	0,861.	0,904.
20 to 29 years	0,919.	0,899.	0,881.
30 to 39 years	0,735.	0,756.	0,788.
40 to 49 years	0,695.	0,694.	0,718.
50 to 59 years	0,773.	0,752.	0,758.
60 years and more	0,782.	0,825.	0,837.
TOTAL	0,761.	0,759.	0,777.

Source: ISPV, own calculations

We can see from table 3.5 that in 2018, wages of men and women differed the most in the wage sphere in the age group of 40–49, where an average wage of a woman 40–49 years old was 28,2 % lower compared to an average wage of a man of the same age. The lowest differences, leaving out the little represented age group of people up to 20, were in the group of the 20 - 29 years old. There was only 11,9 % difference in average wage of a man and a woman here. The results, however, do not change a lot, maybe with an exception of the age group 60+, where the difference between 2011 and 2018 was five percent points lower and was 16,3 % to a disadvantage of women.

Let's now take a look at the salary sphere.

Table 3.6 Average incomes in the salary sphere in 2011 according to gender and age, CZK

	men	women	total
up to 20 years	11.175.	12.785.	11.927.
20 to 29 years	22.132.	20.990.	21.455.
30 to 39 years	28.429.	22.354.	24.905.
40 to 49 years	31.277.	23.660.	25.777.
50 to 59 years	29.458.	24.671.	25.998.
60 years and more	29.731.	26.786.	28.333.
TOTAL	28.657.	23.588.	25.314.

Source: ISPV

Table 3.7 Average incomes in the salary scheme in 2014 according to gender and age, CZK

	men	women	total
up to 20 years	11.799.	14.162.	12.904.
20 to 29 years	22.359.	21.921.	22.097.
30 to 39 years	29.371.	24.178.	26.432.
40 to 49 years	32.795.	24.959.	27.325.
50 to 59 years	30.934.	26.179.	27.452.
60 years and more	30.928.	28.330.	29.566.
TOTAL	29.948.	25.130.	26.794.

Source: ISPV

Table 3.8 Average incomes in the salary scheme in 2018 according to gender and age, CZK

	men	women	total
up to 20 years	16.988.	20.492.	19.091.
20 to 29 years	30.834.	28.789.	29.584.
30 to 39 years	39.537.	32.023.	35.257.
40 to 49 years	43.334.	32.676.	35.980.
50 to 59 years	41.191.	34.325.	36.161.
60 years and more	39.340.	36.250.	37.518.
TOTAL	40.033.	33.090.	35.437.

Source: ISPV

Division of salaries according to age groups in the salary sphere differs significantly from the wage sphere. While in the wage sphere, the highest wages occurred in the age group 40-49 in 2018 and were slightly decreasing after that, in the salary sphere, incomes gradually grow up until the highest age group. An important line is a shift to the group of 30–39 years where any employee reaches 35 257 CZK on average and an income does not grow a lot after that a lot (see table 3.8).

Please notice there is some difference compared to years 2011 and 2014. Whereas in 2011 and 2014 (tables 3.6 and 3.7) the salary in the group of the 60-year-old workers compared to previous age group was significantly higher, in 2018, the difference was much weaker.

Table 3.9 Development of average incomes in the individual age groups in the salary sphere

	2014/2011	2018/2014
up to 20 years	1,082.	1,479.
20 to 29 years	1,030.	1,339.
30 to 39 years	1,061.	1,334.
40 to 49 years	1,060.	1,317.
50 to 59 years	1,056.	1,317.
60 years and more	1,044.	1,269.
TOTAL	1,058.	1,323.

Source: ISPV, own incomes

A comment to tables 3.6 to 3.8 can be added by taking a look at development of salaries in the individual salary groups in the time period 2011-2018.

Just like in the wage sphere, salaries grew a lot slower in 2011–2014 (by 5,8 % in total) compared to the time period 2014–2018 (by 32,3 % in total). It is interesting that the growth in the salary sphere was much faster compared to the wage scheme (comp. tab. 3.4): in 2011–2014 salaries grew by 1,5 percentage point faster, in 2014–2018 by 8 points faster. **In the whole time period of 2011-2018, it is possible to say the salaries grew by about one third faster compared to wages.** Still in 2011, if average wages in 2011 were higher compared to average salaries (25 693 CZK vs. 25 314 CZK), in 2014 average wages and salaries were equal (the was a difference of only 8 CZK), and in 2018, average salaries were 6,3 % higher compared to average wages (35 437 CZK vs. 33 321 CZK). **A partial explanation of the reasons for the difference is described in part 3.5.**

If we look at the development of the salary sphere considering individual age groups, we can see that in both seasons monitored, there was the highest increase in the wages in the group up to 20. Considering assumed low qualification of workers of the age group, we assume that this is primarily a consequence of the minimum and guaranteed wage growth.

In the age groups 20 - 59, salaries grew very similarly, the lowest growth can be spotted in the age group of those 60 and above. Salary growth in this age group fell behind in 2014 - 2018, it was 5 to 7 percent points lower compared to the younger age groups.

Finally, we monitor the differences in payments of men and women.

Table 3.10 Differences in average salaries of men and women in 2011, 2014 and 2018

	M/F 2011	M/F 2014	M/F 2018
up to 20 years	1,144.	1,200.	1,206.
20 to 29 years	0,948.	0,980.	0,934.
30 to 39 years	0,786.	0,823.	0,810.
40 to 49 years	0,756.	0,761.	0,754.
50 to 59 years	0,837.	0,846.	0,833.
60 years and more	0,901.	0,916.	0,921.
TOTAL	0,823.	0,839.	0,827.

Source: ISPV, own calculations

Whereas wages of women were 22–24 % lower than wages of men in the wage sphere, in the income sphere, the difference in the remuneration of both groups is lower: women fall behind men in salaries „only“ by 16 to 18 %. The differences in remuneration differ according to the individual age groups and moreover, they develop in time. Just like in the income sphere, the biggest difference is in remuneration of men and women in the 40–49 years age group, and in 2011, 2014 and 2018 approximately 25 % of the salary of men. On the other hand, in the age group up to 29, there are significantly lower differences, which move between two and seven percent of a man’s salary. In a similar way, the differences are swept away in the older age groups, it is again under ten percent for the 60-year-old and older people, while the difference of this oldest age group gradually decreases in time like in the wage sphere (comp. tab. 3.5).

3.3 Income inequalities according to education

In this part, we analyse the development of average wages according to the highest achieved level of education. Information is classified into five grades in the ISPV system (elementary and incomplete, secondary without maturita, secondary with maturita, higher and bachelor, university) and there is also a group of people whose education is not specified. Bear in mind that the ISPV terminology uses the term „University“ education as a one with Master’s degree (whether „long“, therefore for five or six years, of following the-year one or postgradual one. So our tables are organised in this respect, we use a term "Master and Doctor".

Table 3.11 Average wages in the wage sphere according to the highest achieved education in 2011, 2014 and 2018, CZK

	2011.	2014.	2018.
Elementary and incomplete	16.979.	17.881.	23.398.
secondary without maturita examination	19.863.	20.717.	26.475.
Secondary with maturita examination	25.995.	26.443.	32.630.

Higher specialised and bachelor	31.210.	31.470.	39.476.
Master and doctor	47.703.	47.158.	54.509.
Not stated	21.900.	24.505.	31.244.
TOTAL	25.693.	26.804.	33.321.

Source: ISPV

It is not surprising (table 3.11) that wages in all three monitored years differed significantly according to the highest achieved level of education. In 2018, average wage of a university educated person reached 54 509 CZK, while a wage of a secondary educated worker without matura exam was only 26 475 CZK (therefore more than half lower). A group of people with secondary education without matura was chosen for the comparison also because that this is the most represented group among all employees of wage sphere (in total, there were 1 112 employees working there in 2018), tightly followed by a group of people with secondary education with matura (1 034 employees).

Differences in remuneration according to achieved education often sweep away in time in the wage sphere, as we can see from table 3.12. According to data in the table 3.12, in 2011 - 2014, wages grew the most for the people with elementary education, wages of people with Master's and postgraduate degree even decreased in an absolute amount.

Table 3.12 Development of average wage in the individual educational groups

	2014/2011	2018/2014.
Elementary and incomplete	1,053.	1,309.
secondary without matura examination	1,043.	1,278.
Secondary with matura examination	1,017.	1,234.
Higher specialised and bachelor	1,008.	1,254.
Master and doctor	0,989.	1,156.
Not stated	1,119.	1,275.
TOTAL	1,043.	1,243.

Source: ISPV, own calculations

Differences in remuneration according to achieved education and a change in the educational structure (gradual growth of the proportion of people with higher levels of education) make it possible to analytically monitor the impact of changes of the educational structure on the total amount of average wage. In other words, for the total wage increase (4,3 % in 2011–2014 and 24,3 % in 2014–2018), we can monitor the impact of the growth in wages in the individual groups and what was the impact of changes in the structure of education.

To do that we will use the index analysis apparatus, specifically decomposition of the changeable content index, described e.g. by Hindls and col. (2018). It is decomposition of the changeable content index (IPS) to the constant content index (SS), structure index (STR), Index decomposition is described in equations 1 to 7. Unfortunately, there is one disadvantage of the IPS decomposition. It's based on the so-called gradual changes method when we assume that either wages in the individual education groups will change first and education structure will change after, or education structure will change first and changes in wages of the individual groups will follow. If both changes are independent on each other, decompositions using both ways will be similar. We will take a look at both decompositions and we'll compare the results.

To use the method of division of the changeable content index and to find out the influence of structure or content, we will use equations 3.1 to 3.7, while the first version of division is described by the equations 3.2, 3.5 and 3.6, and the second one by 3.3, 3.4 and 3.7.

Letter $p_{t,i}$ describes an amount of average wage in year t in an education group i , letter $q_{t,i}$ describes a number of people with the highest achieved education i in time t . Letter $Q_{t,i}$ is then a product of p and q and expresses total volume of income of people in an educational group i in time t .

$$\bar{I}_p = \frac{\bar{p}_1}{\bar{p}_0} = \frac{\frac{\sum_{i=1}^n Q_{1,i}}{\sum_{i=1}^n q_{1,i}}}{\frac{\sum_{i=1}^n Q_{0,i}}{\sum_{i=1}^n q_{0,i}}} = \frac{\frac{\sum_{i=1}^n p_{1,i} q_{1,i}}{\sum_{i=1}^n q_{1,i}}}{\frac{\sum_{i=1}^n p_{0,i} q_{0,i}}{\sum_{i=1}^n q_{0,i}}} = \frac{\frac{\sum_{i=1}^n Q_{1,i}}{\sum_{i=1}^n Q_{1,i}}}{\frac{\sum_{i=1}^n Q_{0,i}}{\sum_{i=1}^n Q_{0,i}}}$$

Equation 3:1 – Index of changeable composition

$$I_{SS}^{(q_0)} = \frac{\frac{\sum_{i=1}^n p_{1,i} q_{0,i}}{\sum_{i=1}^n q_{0,i}}}{\frac{\sum_{i=1}^n p_{0,i} q_{0,i}}{\sum_{i=1}^n q_{0,i}}} = \frac{\sum_{i=1}^n p_{1,i} q_{0,i}}{\sum_{i=1}^n p_{0,i} q_{0,i}}$$

Equation 3:2 – Index of stable composition with scales from situation 0

$$I_{SS}^{(q_1)} = \frac{\frac{\sum_{i=1}^n p_{1,i} q_{1,i}}{\sum_{i=1}^n q_{1,i}}}{\frac{\sum_{i=1}^n p_{0,i} q_{1,i}}{\sum_{i=1}^n q_{1,i}}} = \frac{\sum_{i=1}^n p_{1,i} q_{1,i}}{\sum_{i=1}^n p_{0,i} q_{1,i}}$$

Equation 3:3 – Index of stabile composition with scales from situation 1

$$I_{STR}^{(p_0)} = \frac{\frac{\sum_{i=1}^n p_{0,i} q_{1,i}}{\sum_{i=1}^n q_{1,i}}}{\frac{\sum_{i=1}^n p_{0,i} q_{0,i}}{\sum_{i=1}^n q_{0,i}}}$$

Equation 3:4 – Index of structure with scales from situation 0

$$I_{STR}^{(p_1)} = \frac{\frac{\sum_{i=1}^n p_{1,i} q_{1,i}}{\sum_{i=1}^n q_{1,i}}}{\frac{\sum_{i=1}^n p_{1,i} q_{0,i}}{\sum_{i=1}^n q_{0,i}}}$$

Equation 3:5 – Index of structure with scales from situation 1

$$\bar{I}_p = I_{SS}^{(q_0)} \cdot I_{STR}^{(p_1)}$$

Equation 3:6 – Relationship between the changeable content index, index of stabile content with scales from situation 0 and structure index with scales from situation 1

$$\bar{I}_p = I_{SS}^{(q_1)} \cdot I_{STR}^{(p_0)}$$

Equation 3:7 – Relationship between the changeable content index, index of stabile content with scales from situation 1 and structure index with scales from situation 0

Table 3.13 Educational structure of population in the income sphere in 2011, 2014 and 2018, workers (ths.)

	2011.	2014.	2018.
Elementary and incomplete	189,4.	171,3.	213,4.
secondary without maturita examination	1.162,9.	1.111,9.	1.098,9.
Secondary with maturita examination	988,7.	1.033,7.	1.108,6.
Higher specialised and bachelor	71,3.	99,2.	133,8.

Master and doctor	367,5.	411,5.	460,5.
Not stated	92,3.	73,3.	83,1.
TOTAL	2.872,1.	2.900,8.	3.098,4.

Source: ISPV

If we add the figures from the table 3.11 and the data about education structure of population (table 3.13) to equation 3.1 to 3.7, we will get the following results.

If we count the results using the first option, we get the index of changeable content in the amount of 1,0225 and the structure index in the amount of 1,0202. In the second version, the results are very similar (ISS=1,0204 and ISTR=1,0223), we can therefore use any of them with no further analyses or consideration. The results mean that **a rice in prices in the individual groups and a change of educational structure participated by approximately the same level in 2011 to 2014**. In other words, if no change of educational structure occurred, the total growth of average wage in the wage sphere for three years would be only on the level just below two percent (therefore under one percent a year).

In 2014–2018, average wages in the individual education groups again didn't grow in the same way, they grew the most in case of people with the lowest education (31% growth for people with elementary education, 28% growth for people with secondary education without maturita), and it was the least for people with master and postgradual education (only by 16 %). A cause is likely to be a fast growth of the minimum and guaranteed wages, which primarily concerns the worst paid people (therefore those with the lowest education).

If, for the time period of 2014 - 2018, we also do a decomposition of the changeable content index, we come to absolutely different results compared to 2011 to 2014. Total growth of wages by 24 % is from 23 % explained by growth in wages in the individual educational groups and only from 1 % by a change of education structure (ISS=1,2322 and ISTR=1,0089; the results are almost identical in both versions of decomposition). The impact of changes in the educational structure on average wages in the wages sphere therefore decreases in the monitored time period 2011 to 2018.

Let's now look into the salary sphere (tables 3.14 and 3.15).

Table 3.14 Average salaries in the salary sphere according to the highest achieved education in 2011, 2014 and 2018, CZK

	2011.	2014.	2018.
Elementary and incomplete	14.058.	14.354.	19.816.

secondary without maturita examination	16.595.	17.222.	23.370.
Secondary with maturita examination	23.989.	25.560.	33.429.
Higher specialised and bachelor	27.331.	28.327.	37.287.
Master and doctor	33.044.	34.617.	44.815.
Not stated	23.644.	25.632.	31.644.
TOTAL	25.314.	26.794.	35.437.

Source: ISPV

In 2018, average wages of the people with Master's degree and higher education were 92 % higher compared to people with secondary education without maturita. The differences are therefore a bit lower compared to the wage sphere, where the premium for Master's / Postgradual education is much higher. We can see the fact even better, if we compare the premium for completing Master's / Postgradual education and secondary education with maturita. That made 34 % in the salary sphere and 67 % in the wages sphere in 2018. **In 2018, the premium for completing university education of level two is almost double in the wage sphere compared to the salary sphere.**

Table 3.15 Developemnt of average salaries in the individual educational groups

	2014/2011	2018/2014
Elementary and incomplete	1,021.	1,381.
secondary without maturita examination	1,038.	1,357.
Secondary with maturita examination	1,065.	1,308.
Higher specialised and bachelor	1,036.	1,316.
Master and doctor	1,048.	1,295.
Not stated	1,084.	1,235.
TOTAL	1,058.	1,323.

Source: ISPV, own calculations

The differences between the individual educational groups decrease in time, but not as much as in the wages sphere. If we stay in the salary sphere, we can see that in 2011 to 2014, average salaries grew by 2,1 to 6,5 %, the fastest in case of people with secondary education without maturita, the lowest for people with elementary or even lower education. In the time period 2014 to 2018, wages grew the fastest in two lowest education groups (by 35,7 %, resp. by 38,1 %), probably again due to the growth of the minimum and guaranteed wage, which showed in the salary tables, too. Differences in the growth of salaries between people with secondary education with maturita (30,8 %) and Master's or postgradual degree (29,5 %) was practically

negligible. The results differ significantly from the wage sphere (table 3.12). While in the wage sphere, the scissors between the educational groups are open much wider and they gradually go tighter, in the salary sphere, they are much tighter and do not change much in the course of time.

If we do decomposition of the changeable content index for the salary sphere in the same way it was done in the wage sphere, we reach different results.

In 2011 to 2014, average salary in the salary sphere grew by 5,8 %, within that 5,3 % was a result of growing wages in the individual groups and only 0,5 % was caused by a change in the educational structure (both influences were just as important in the salary sphere). In the time period 2014 to 2018, the 32,3 % growth of average salary was caused by changes in the individual groups by 30,7 % and a change of structure by 1,2 %. The method of decomposition has no influence, just like in the salary sphere.

3.4 Income inequalities according to place of work

Income inequalities will be assessed according to the individual regions and again, we will focus on 2011, 2014 and 2018. And again, we will look into the wage sphere and the salary sphere separately.

In the wage sphere, the highest wages were traditionally in the capital city Prague (42 478 CZK in 2018), the lowest were in the Karlovy Vary region (28 341 CZK in 2018, therefore one third lower compared to Prague).

Karlovy Vary region was the worst in 2011 and 2014 and in those years, wages in the capital city Prague were dominant.

The figures are shown in table 3.16

Table 3.16 Average wages according to regions in 2011, 2014 and 2018, CZK

	2011.	2014.	2018.
Capital city Prague	35.415.	35.651.	42.478.
Central Bohemian	25.943.	27.186.	34.605.
South Bohemian	22.873.	24.189.	30.124.
Plzeň region	23.691.	25.741.	32.479.
Karlovy Vary region	21.055.	22.241.	28.341.
Ústí region	23.003.	23.999.	30.417.
Liberec region	23.170.	24.638.	31.352.
Královéhradecký region	22.252.	23.903.	30.785.

Pardubice region	22.758.	23.757.	30.008.
Vysočina region	22.369.	23.900.	30.425.
South Moravian	24.429.	25.868.	32.150.
Olomouc region	22.192.	23.497.	29.080.
Zlín region	22.367.	23.485.	30.036.
Moravian-Silesian	23.746.	24.257.	29.622.
TOTAL	25.693.	26.804.	33.321.

Source: ISPV

We can see from table 3.17 that the differences between the regions decrease in time. Average wage practically did not grow in Prague in 2011 and 2014, on the contrary, it grew by two to seven percent in the vast majority of regions. One exception is the Moravian-Silesian region with only 2,2% growth, and on the other side is the Pilsen region with 8,7% growth. In 2014–2018, the lowest growth of wages could be again seen in the capital city Prague (19,1 %), it was the highest in the Karlovy Vary region (28,8 %). The vast majority of regions had similar increase of wages - between 24 and 28 percent. The reason for lower increase in the wages in Prague will probably be different education structure of workers, as we can see from the previous results that it was the wages of the university graduates that grew the slowest in the wage sphere. **Hand in hand with a decrease in the differences in remuneration of workers according to achieved education, regional differences also decrease in the wage sphere.**

We can again do a decomposition of the changeable content index to the index of constant content and the index of structure. Concerning total growth of wages in the wage sphere by 4,3 % in 2011 to 2014, it was caused by an increase in wages in the individual regions by 4,1 % and by a change in the educational structure by 0,2 %. In 2014 to 2018, there was 24,4 % increase in wages, which was caused by an increase in wages in the individual regions by 24,0 % and a change in educational structure by 0,3 %. No matter how there is some sort of change in the structure of workers caused for example by university graduates⁶ staying in their seat cities, the change of the regional structure of employment has no significant impact on average wages yet (overall impact for years 2011 to 2018 was below a half of one percentual point).

Table 3.17 Development of average wages in the individual regions in 2011 to 2018

	2014/2011	2018/2014

⁶ This information emerges for example from the results of the University of Economics in Prague investigation.

Capital city Prague	1,007.	1,191.
Central Bohemian	1,048.	1,273.
South Bohemian	1,058.	1,245.
Plzeňský	1,087.	1,262.
Karlovarský	1,056.	1,274.
Ústecký	1,043.	1,267.
Liberecký	1,063.	1,273.
Královéhradecký	1,074.	1,288.
Pardubický	1,044.	1,263.
Vysočina	1,068.	1,273.
South Moravian	1,059.	1,243.
Olomoucký	1,059.	1,238.
Zlínský	1,050.	1,279.
Moravian-Silesian	1,022.	1,221.
TOTAL	1,043.	1,243.

Source: ISPV, own calculations

Let's now look at the salary sphere (table 3.18)

Table 3.18 Average salaries according to regions in 2011, 2014 and 2018, CZK

	2011.	2014.	2018.
Capital city Prague	29.911.	31.913.	42.615.
Central Bohemian	23.770.	25.091.	33.105.
South Bohemian	23.844.	25.018.	32.992.
Plzeň region	25.944.	27.389.	35.764.
Karlovy Vary region	24.055.	25.487.	33.249.
Ústí region	23.411.	24.542.	32.367.
Liberec region	23.581.	24.827.	32.961.
Královéhradecký	24.630.	25.962.	34.264.
Pardubice region	22.967.	24.425.	32.219.
Vysočina	24.018.	25.238.	33.564.
South Moravian	24.890.	26.187.	34.884.
Olomouc region	24.566.	25.748.	34.310.
Zlín region	23.029.	24.338.	31.955.
Moravian-Silesian	24.631.	25.940.	33.814.
TOTAL	25.314.	26.794.	35.437.

Source: ISPV

Just like in the wage sphere, the highest salaries in the salary sphere go to people in the capital city Prague (42 615 CZK in 2018). In all three monitored years, the worst income goes to employees in Zlín region (31 955 in 2018). Differences between regions are lower compared to

the wages sphere. Whereas in the wage sphere, the difference between the highest and the lowest value is almost 50 % (specifically 49,9 %), the difference was only 33,3 % in the salary sphere.

Table 3.19 Development of average salaries in the individual regions in 2011 and 2018

	2014/2011	2018/2014
Capital city Prague	1,067.	1,335.
Central Bohemian	1,056.	1,319.
South Bohemian	1,049.	1,319.
Plzeň region	1,056.	1,306.
Karlovy Vary region	1,060.	1,305.
Ústí region	1,048.	1,319.
Liberec region	1,053.	1,328.
Královéhradecký	1,054.	1,320.
Pardubice region	1,063.	1,319.
Vysočina	1,051.	1,330.
South Moravian	1,052.	1,332.
Olomouc region	1,048.	1,333.
Zlín region	1,057.	1,313.
Moravian-Silesian	1,053.	1,304.
TOTAL	1,058.	1,323.

Source: ISPV, own calculations

If we monitor a development of regional average salaries, we can see different results in the salary sphere and in the wage sphere. In both monitored time periods, salaries grew the fastest in the capital city Prague, though the difference was not big (wages grew the slowest in Prague in the wage sphere). It is therefore possible to say that **in the income sphere, the differences between the regions are lower than in the salary sphere, and unlike in the wage sphere, differences in average wages among the regions do not decrease.**

If we carry out a decomposition of the changeable content index, we will see that a change in the regional structure has no impact on the amount of average salary. The growth of salaries can be therefore completely attributed to the growth of salaries in the individual regions.

3.5 Income inequalities according to a type of performed work

We can finally see big differences in remuneration when workers are divided according to a type of work performed (table 3.20).

Table 3.20 Average wages according to a type of performed work in the income sphere in 2011, 2014 and 2018, CZK

	2011.	2014.	2018.
Manual workers	19.249.	20.170.	25.967.
Non-manual workers	33.329.	33.903.	41.271.
TOTAL	25.693.	26.653.	33.334.

Source: ISPV

According to data in the table 3.20, non-manual workers had an average wage of 41 271 CZK in 2018, whereas manual workers only 25 967 CZK (therefore 37 % lower). Looking at development in time (table 3.20), we can see again that the differences sweep away in time. Between 2011 and 2014 average wages of non-manual workers grew by 4,8 %, while wages of non-manual workers only by 1,7 %, if compared to 2014 and 2018, average wages of non-manual workers grew by seven percentual points faster. A cause will again be a significant increase of the minimum and guaranteed wage.

Table 3.21 Development of average wage of manual and non-manual staff between 2011 and 2018

	2014/2011	2018/2014
Manual workers	1,048.	1,287.
Non-manual workers	1,017.	1,217.
TOTAL	1,043.	1,243.

Source: ISPV, own calculations

Table 3.22 Average salaries according to a type of performed work in the salary sphere in 2011, 2014 and 2018, CZK

	2011.	2014.	2018.
Manual workers	15.974.	17.165.	23.603.
Non-manual workers	27.563.	29.295.	38.462.
TOTAL	25.314.	26.794.	35.437.

Source: ISPV

A difference between manual and non-manual workers in the salary sphere is slightly higher than in the wages sphere. While in the wages sphere, manual workers received an average of 63 % of a salary of a non-manual worker in 2018, this proportion was only 61 % in the salary sphere. We can see one interesting fact. Eebet though average wage was higher in the salary sphere compared to the wage sphere in 2018 (35 437 CZK in salary sphere and 33 334 CZK in the wage one), average incomes in both spheres were behind (for manual workers: 23 603 CZK

in the salary sphere compared to 25 967 CZK in the wage sphere, for non-manual workers: 38 462 CZK in the salary sphere against 41 271 CZK in the wage sphere). **A reason for the difference in remuneration between the salary and wage sphere is therefore not a difference in remuneration in the same type of work but a significant difference in the workforce composition.** Our analysis is carried out only in the most overall classification possible - to manual and non-manual workers; it could be done in greater detail according to type of employment according to the CZ-ISCO classification.

It can be qualified in greater detail using decomposition of the changeable content index. We are not going to use it here to compare the time but to compare the space (comparison of individual spheres). We will look into what part of the difference between the salary and wage sphere goes to a difference in average salaries in the individual spheres (the constant content index) and what part can be explained by a different structure of workforce. In the equities 3.1–3.7, letter p_{it} will stand for average wage, while i will stand for the type of position (manual/non-manual) and t will stand for the sphere type (wage/salary).

The calculation will be done for all three monitored years, 2011, 2014 and 2017. Before that, we describe a structure of workforce according to the individual positions, spheres and years in the tables 3.23 and 3.24.

Table 3.23 Workforce structure according a type of work in the salary sphere in 2011, 2014 and 2018, workers (thousands)

	2011.	2014.	2018.
Manual workers	1.555,9.	1.481,3.	1.605,6.
Non-manual workers	1.313,4.	1.324,9.	1.490,2.
TOTAL	2.869,3.	2.806,3.	3.095,8.

Source: ISPV

Table 3.24 Workforce structure according to a type of work in the salary sphere in 2011, 2014 and 2018, workers (thousands)

	2011.	2014.	2018.
Manual workers	121,4.	126,2.	130,4.
Non-manual workers	504,1.	485,9.	510,3.
TOTAL	625,5.	612,1.	640,7.

Source: ISPV

Notice that (in connection with economic recession) between 2011–2014, a number of manual workers decreased in the wage sphere, while a number of non-manual workers grew slightly, but it was just the opposite in the salary sphere.

Let's now look at the results of the changeable content index decomposition (table 3.25).

Table 3.25 Decomposition of the changeable content index to explain the difference between an average wage in the wage sphere and an average salary in the salary sphere

	2011.	2014.	2018.
Influence of different average salaries in the individual spheres	0,828.	0,859.	0,923.
Influence of different structure between the wage and salary sphere	1,190.	1,170.	1,152.
Index of average salary to average wage	0,985.	1,005.	1,063.

Source: ISPV, own calculations

The results specified in the table 3.25 are quite surprising. We can see that different remuneration in the salary and wage spheres is on one hand cause by a different structure of the type of work (for example in 2018, it resulted in 15% difference between the salary and the wage sphere), differences in the incomes in the individual spheres work in the opposite direction. Both differences decrease in time: falling of incomes in the salary sphere behind the wage sphere decreased from 17 % in 2011 to 8 % in 2018, on the other hand, the influence of the structure difference decreased from 19 % in 2011 to 15 % in 2018. As the salaries coming closer to the wages in the individual positions was faster than the structure change, there was grew of salaries in relation to wages. Using the second version of the changeable content decomposition, the results practically do not differ.

This type of analysis should be normally carried out as a part of a discussion about a relation of remuneration in the salary sphere and the wage one.

4. Polarization of values and opinions

Research of values, opinions and approaches has a long tradition in social sciences. Since 1981 already, the European research of values (EVS) has been carried out on regular basis, which looks into the development of approaches people have in many countries. In this chapter, we will therefore look into the values of Czech society, and we will find out which characteristics Czech society is polarized by in their opinions. We will select only a few questions related to the labour market from the EVS research. We will leave out for example the questions concerning religion, opinions about migration or marriage of people of the same sex.

4.1 What polarizes Czech society

We already know from previous chapters that behaviour of people differs depending on their social origin. People with primary education will have a different opinion than university graduates. There will be differences between men and women, between the young and the old. There are many possibilities to divide society. We have therefore decided for the following possibilities and we will test which characteristics divide Czech society and which not:

- **Gender** we assume men and women differ in their opinions
- **Age** we assume there are different opinions of fresh school graduates (25-30 years), of young employees, who have to solve housing and start family (31-40 years), of middle-aged employees (41-50 years) and of people just before pension age (51-65 years)
- **Education:** we distinguish elementary, apprenticeship, secondary with maturity examination and university
- **Employment:** the EVS data include information about whether a man is employed, self-employed, unemployed, a student, on parental leave or similar. For practical reasons, we distinguish only employed people, self-employed and unemployed (for any reason)
- **Employer:** we distinguish between people employed in a state sector and in a private sector
- **Size of municipality:** we analyse separately small municipalities (to 5 000 people), medium size ones (to 20 000 people) and large ones (above 20 000 people)

So we have available. 2 gender categories, 4 age categories, 4 education categories, 3 employment categories, 2 employer categories and 3 categories of municipality size. So, 18 categories altogether. We will monitor how society is polarized within those 18 categories. It

should result in the information about whether the polarization factor is age, gender, education, employment, employer or a size of municipality.

Polarization will be monitored in selected variables related to employment and labour market. It is especially variables that inform about an importance of the individual components of respondent's life, determine his trust in various groups of people, describe his expectations of a good job, determine his level of responsibility towards society and introduce his expectations about how much an individual should be responsible for his destiny and how much a state should care for him.

4.2 Data used: European research of values

To obtain statistical analyses in this chapter, we have used data from the selective investigation European Values Survey (Evropský výzkum hodnot, EVS). It is an international investigation with a history from 1981, when there was its first wave in then the western European countries. The second wave, involving post-communist countries, took place in 1991. The third wave involving other countries took place in 1997, the fourth wave in 2008 and the fifth one, which was the last so far, took place in 2017.

The Czech Republic, respectively Czechoslovakia, participated in the last four waves of EVS investigation. Data are therefore available for 1991, 1997, 2008 and 2017. Collecting data on Czech level is provided for by the Faculty of Social Studies of Masaryk University. Data are later internationally harmonized and published for academic and educational purposes.

Data file contains, besides basic socio-demographic information about respondents (such as age, gender, education, address, religion and other), also variables concerning their positions and opinions in different areas. There are regular questions concerning social distance (which groups of people a respondent wouldn't like to have as neighbours), post-materialism, characteristics of a good job, role of men and women and others.

We have only used the data from the latest fifth wave for the analyses. Data file involved 1 812 respondents.

4.3 The importance of individual constituents of life

Within the EVS research, the respondents were asked a question "Tell me, please, how much are the following facts important in your life?". Respondents assessed six categories on a scale from 1 to 4, when 1 stands for "very important" and 4 stands for "not important at all". The following table 4.1 summarizes arithmetic average of answers, which means that lower numbers express higher importance, lower numbers express lower importance of the category in respondent's life.

Men and women consider family the most important, family has almost maximum importance for women (average 1,09 compared to 1,22 for men). The second most important value for both genders is work, which is slightly more important for women compared to men.

Table 4.1 Importance of the individual components of life

Respondent's gender						
	work	family	friends	free time	politics	religion
man	1,66.	1,22.	1,70.	1,75.	2,90.	3,31.
woman	1,64.	1,09.	1,59.	1,75.	3,01.	3,13.
Respondent's education						
	work	family	friends	free time	politics	religion
Primary school	1,93.	1,15.	1,57.	1,84.	3,14.	2,91.
apprenticeship	1,66.	1,18.	1,72.	1,80.	3,07.	3,27.
maturita examination	1,61.	1,13.	1,61.	1,71.	2,91.	3,23.
University	1,58.	1,09.	1,56.	1,70.	2,81.	3,19.
Respondent's age						
	work	family	friends	free time	politics	religion
25 to 30 years	1,72.	1,23.	1,57.	1,63.	3,05.	3,50.
31 to 40 years	1,60.	1,13.	1,57.	1,68.	3,02.	3,26.
41 to 50 years	1,48.	1,12.	1,55.	1,66.	3,07.	3,21.
51 to 65 years	1,60.	1,14.	1,71.	1,73.	2,96.	3,29.
Respondent's employment						
	work	family	friends	free time	politics	religion
employee	1,49.	1,14.	1,61.	1,64.	2,99.	3,33.
self-employed	1,49.	1,21.	1,59.	1,69.	2,94.	3,15.
unemployed	1,85.	1,13.	1,66.	1,88.	2,95.	3,08.
state sphere	1,65.	1,12.	1,64.	1,75.	2,89.	3,15.
private sphere	1,59.	1,13.	1,59.	1,68.	2,99.	3,27.
Size of place they live						
	work	family	friends	free time	politics	religion
0 - 5.000 people	1,64.	1,12.	1,62.	1,78.	2,96.	3,07.
5.001 -20.000 people	1,69.	1,15.	1,66.	1,80.	2,99.	3,17.
20.000 and more	1,64.	1,15.	1,64.	1,72.	2,96.	3,30.

Source: EVS

The importance of work and family slightly grows in connection with higher levels of achieved education. Looking at the table 4.1, however, we can see that achieving higher education is accompanied by putting more importance to all aspects of life. Therefore, it seems that people with lower education do not think about various aspects of life that deeply, "they take life as it is", whereas people with higher education think more about what is important for them.

Similar action can be also seen in the oldest respondents aged 51 - 65 years. For all other age groups, the importance of work and family gradually grows, but the importance of both values then decreases at once in the oldest age category. On the contrary, the importance of free time gradually decreases with age.

When looking at the values considering employment and employer, it is interesting that work, free time and friends have the least importance for people without employment. Again, we can see a repeating pattern when some part of respondents is more indifferent to life and accepts it as it is. There are not many bigger differences in other figures according to employment or size of municipality.

If something polarizes the society from the respect of an importance of the individual aspects of life, it is gender and education of respondents.

4.4 Trust in the individual groups of people

Respondents of the fifth wave of the EVS research were asked a question "I would like to ask about how much you trust people from different groups. Could you tell me for each of the following groups of people whether you trust them completely, partly, little or not at all?" Individual groups of people should evaluate on a scale from 1 to 4, while stands for „I trust completely“ and 4 for „I don't trust at all“. Table 4.4 summarizes arithmetic averages of the individual answers, where the lowest number means a higher level of trust and a higher number means a lower level of trust.

Differences in trust in the individual groups of people according to gender of respondent are only minimal. But apparently, it is women more than men who are prone to trust more to people of a different faith, on the other hand, men trust to people of different nationality just like women. Respondents of both genders trust the family the most, followed by acquaintances and neighbours.

Same order of trustworthiness in the individual groups of people can be found in the analysis according to achieved level of education by a respondent. Trustworthiness in the individual

groups of people grows in the eyes of a respondent together with higher education, which is in all categories.

Division according to respondent's age is interesting. 40 years of age is the dividing line. Respondents above 40 tend to trust more to neighbours and acquaintances, even to new acquaintances. On the contrary to that, people below 40 tend to trust more to people of different religions and to people of different nationalities.

When looking at the respondents in the respect of their employment and employer, it is clear that employees working in the state sphere are more prone to trust people in all categories except for their own family when the trust of employees from the state sphere and private sphere is quite equal. Compared to employers and the self-employed, the unemployed trust more in the majority of cases.

Table 4.2 Trust of respondents in the individual groups of people

Respondent's gender						
	family	neighbours	acquaintances	new acquaintances	people of different faith	people of different nationality
man	1,19.	2,04.	1,80.	2,66.	2,61.	2,65.
woman	1,15.	1,99.	1,76.	2,71.	2,56.	2,69.
Respondent's education						
	family	neighbours	acquaintances	new acquaintances	people of different faith	people of different nationality
Primary school	1,20.	2,12.	1,80.	2,88.	2,76.	2,81.
apprenticeship	1,19.	2,01.	1,83.	2,70.	2,75.	2,89.
maturita examination	1,15.	1,98.	1,73.	2,66.	2,49.	2,58.
University	1,13.	1,98.	1,78.	2,67.	2,34.	2,40.
Respondent's age						
	family	neighbours	acquaintances	new acquaintances	people of different faith	people of different nationality
25 to 30 years	1,19.	2,18.	1,95.	2,77.	2,57.	2,66.
31 to 40 years	1,18.	2,14.	1,81.	2,77.	2,59.	2,66.
41 to 50 years	1,17.	2,07.	1,83.	2,75.	2,63.	2,72.
51 to 65 years	1,18.	2,02.	1,76.	2,69.	2,62.	2,74.
Respondent's employment						
	family	neighbours	acquaintances	new acquaintances	people of different faith	people of different nationality
employee	1,16.	2,06.	1,81.	2,73.	2,58.	2,69.
self-employed	1,24.	2,09.	1,89.	2,69.	2,46.	2,53.
unemployed	1,16.	1,94.	1,73.	2,66.	2,59.	2,67.

state sphere	1,15.	1,93.	1,70.	2,63.	2,49.	2,56.
private sphere	1,15.	2,05.	1,78.	2,73.	2,64.	2,73.
Size of place they live						
	family	neighbours	acquaintances	new acquaintances	people of different faith	people of different nationality
0 -5.000 people	1,15.	1,88.	1,73.	2,64.	2,54.	2,67.
5.001 -20.000 people	1,15.	2,00.	1,78.	2,70.	2,63.	2,69.
20.000 and more	1,19.	2,10.	1,81.	2,73.	2,59.	2,68.

Source: EVS

There is a clear trend that can be identified when classifying respondents according to a size of municipality where they live. Trust in one's own family members, neighbours, acquaintances and new acquaintances slowly decreases with the growing size of municipality. The larger is the municipality where a respondent lives the less s/he trusts to the groups. For people of different faith or people of different nationalities, the lowest level of trust is in case of respondents from municipalities of medium size (5 - 20 thousand people).

Concerning the trust in the individual groups of people, the strongest polarization influences are completed education, respondent's age (above 40 or below 40), his employer (state versus private sphere) and a size of municipality where a respondent lives.

4.5 Rendition of good employment

The fifth wave respondents of the EVS statistical investigation were, besides other things, asked a question "Here is a list of what people consider important in their work. Have a look at the list, please, and tell me what you personally consider important?". The enquirer also showed six characteristics and marked those that were considered important for the respondents in employment. This is a good opportunity to mention that similar question was asked in all five waves of the ECS research and there were similar possibilities to answer. That way, social scientists had an opportunity to compare the development of a good work concept in a relatively long time horizon. Due to an unknown reason, however, there was a big change in the fifth wave when the battery of about 13 answers was reduced to only 6, while some very interesting categories, such as a need of stable employment security, were left out. The answers to the question would really be very interesting particularly at the time after economic crises.

Table 4.3 shows proportions of respondents who marked given characteristic of work as important. The higher the percentual value is in the specific box of the table, the more respondents marked the item as important.

Basic division according to gender already confirms the generally accepted theory of gender roles. For men, it is slightly more important to have a good salary, they feel they are providers for families, and they need to provide for the families. On the other hand, women prefer good working hours more to have enough time to care for children and household. Compared to women, men are more ambitious - in a greater number of cases, they consider it important to have an opportunity to use their initiative, to achieve something or to have responsibility for their work.

Good salary is the most important thing for respondents with secondary education with apprenticeship certificate. For all other values concerning a good job, it is true that as a level of education grows their importance grows rapidly, too. For example, an opportunity to use initiative is important just for 33 % of people with elementary education but it is 73 % for people with a university diploma. People with higher education want to have a pleasant job (long holiday, good working hours), but also an opportunity for self-fulfilment (possibility to use initiative, to achieve something, to take responsibility for results).

The importance of a good salary decreases with growing age, except for the age group of 31 - 40 which considers a good salary to be the least important of all age groups. Respondents of this age group also put the least emphasis to good working hours but require generous holiday to the greatest extent. The requirement of good working hours rapidly decreases in the oldest age group. Clearly, it is about respondents who already have adult children who often don't live in the same household, and they do not need to attend to them in their free time. Desire for a possibility to use initiative and a possibility to achieve something decreases with age - older respondents consider the values less important compared to the younger ones. The youngest age group of fresh graduates (25-30 years) differs from the other age groups by a significantly lower tendency to accept work with full responsibility (this was marked as important by only 57 % of the youngest respondents compared to 62 %, 60 % and 58 % in other age groups).

As looking at the answers divided according to a type of employment, it seems that those self-employed are motivated more by internal satisfaction from work, while employees go after material aspects. Employees, more often than the self-employed, consider important good salary, generous holiday and good working hours. On the other hand, the self-employed, more than employees, consider important and a characteristic of good work an opportunity to use initiative, a possibility to achieve something and a possibility to be responsible for own work.

Similar, just mirror reversed, division can be seen when comparing the state and the private sphere. Employees from the state sphere want to use initiative and have some responsibility more often. Employees in the private sphere state more often that good work means good salary and good working hours, a small - but still visible - difference can be found in the category "to have an opportunity to achieve something".

The bigger the city a respondent lives in is the more important it is for him to have good working hours and generous holiday, to have an opportunity to use initiative and also a good salary, though the last item is a bit weaker in the biggest towns above 20 000 people. A possibility to achieve something is the strongest for people of medium-size towns (5-20 thousand people), it is comparable in both remaining town categories. Attempts to have work where it's possible to take responsibility decreases together with a size of town / city. It is the weakest in biggest cities (56 %) and the strongest in the smallest towns (60 %). Considering the values connected to good work, education is the strongest influence which polarizes society. Age and gender also play some part. A strong dividing line is between the state and private employees and between the employees and those self-employed.

Table 4.3 Which employment characteristics are considered important by respondents, %

Respondent's gender						
	good salary	good working hours	opportunity to show initiative	generous holiday	opportunity to achieve something	responsible work
man	91,80.	72,82.	55,99.	56,32.	68,57.	59,75.
woman	90,56.	77,32.	51,19.	55,28.	63,24.	56,77.
Respondent's education						
	good salary	good working hours	opportunity to show initiative	generous holiday	opportunity to achieve something	responsible work
Primary school	90,74.	70,97.	32,62.	51,35.	58,39.	48,63.
apprenticeship	92,75.	71,91.	43,77.	55,62.	57,22.	51,80.
maturita examination	90,10.	78,25.	56,38.	55,28.	68,06.	62,04.
University	91,03.	80,48.	73,40.	58,84.	77,40.	65,48.
Respondent's age						
	good salary	good working hours	opportunity to show initiative	generous holiday	opportunity to achieve something	responsible work
25 to 30 years	96,27.	82,96.	62,79.	62,02.	73,08.	56,69.
31 to 40 years	89,69.	80,34.	56,25.	66,30.	67,96.	62,01.
41 to 50 years	95,36.	84,67.	58,51.	61,84.	67,35.	60,21.
51 to 65 years	90,45.	76,43.	48,28.	51,41.	59,09.	57,85.
Respondent's employment						

	good salary	good working hours	opportunity to show initiative	generous holiday	opportunity to achieve something	responsible work
employee	94,15.	83,10.	58,29.	63,21.	66,10.	60,32.
self-employed	88,89.	82,11.	70,65.	55,06.	77,32.	67,42.
unemployed	87,79.	66,32.	45,13.	47,06.	62,57.	53,55.
state sphere	88,49.	74,59.	55,97.	56,35.	64,43.	61,61.
private sphere	92,26.	79,03.	53,13.	57,05.	66,67.	58,18.
Size of place they live						
	good salary	good working hours	opportunity to show initiative	generous holiday	opportunity to achieve something	responsible work
0 -5.000 people	89,45.	73,18.	48,60.	54,60.	64,95.	60,47.
5.001 -20.000 people	92,44.	74,93.	54,46.	55,21.	68,54.	57,56.
20.000 and more	91,53.	77,29.	55,40.	56,59.	64,41.	56,48.

Source: EVS

4.6 Responsibility towards society

Within the ECS research, respondents were also asked a question how much they agreed or disagreed with the statements provided. There were for example the following statements:

- A man has to have a job (work) to be able to fully develop his skills.
- It is degrading to get money without having to work for it.
- People who do not work do not go lazy.
- Working is a duty towards society.
- Work should always be a priority, even though it means having less time.

All these statements may be marked as appreciation of respondents towards society, an attempt to work to return everything society have given them in a form of upbringing, education and social security.

Respondents replied on a scale 1 to 5, where 1 meant "absolutely agree" and 5 meant "absolutely disagree". The table 4.4 below summarizes answers of different types of respondents according to arithmetic average. Lower values mean greater agreement with that statement, higher values mean less agreement with that statement. To make it easy to grasp the statements, they are enclosed in the table in a shorter version.

When looking at the classification of answers according to gender, we can see that men and women do not differ much. Women think a bit more often that it is a duty to work (average 2,27

versus the average of 2,41 of male respondents). Concerning other values, respondents of both genders reply in a very similar way.

If we classify the respondents according to the highest achieved education, reactions of the university graduates are surprising. Concerning the statement that one has to have work to develop his skills, all education groups agree in a similar way (average around 2,20), only the university graduates agree a bit less (average around 2,32). We can see the same jump in other values, too - it is degrading to take money without work, work is a duty towards society - where a level of agreement grows the higher the education is, except for the highest education, where it sharply falls. The higher education a man achieves the less he thinks work should be a priority before everything else. In this respect, university graduates again agree less with the presented statement, but they do not differ from the common trend a lot. Moreover, the last thing presented corresponds well with the findings presented in the previous chapter - people with university education require good working hours and generous holiday from work.

Table 4.4 Opinions of respondents on responsibility towards society

Respondent's gender					
	A man needs to have work	It is degrading to rake money without work	People who don't work become lazy	It is a duty to work	Work is a priority
man	2,24.	2,62.	1,92.	2,41.	2,85.
woman	2,20.	2,59.	1,92.	2,27.	2,90.
Respondent's education					
	A man needs to have work	It is degrading to rake money without work	People who don't work become lazy	It is a duty to work	Work is a priority
Primary school	2,20.	2,67.	1,87.	2,30.	2,70.
apprenticeship	2,15.	2,61.	1,96.	2,34.	2,79.
maturita examination	2,22.	2,53.	1,88.	2,25.	2,92.
University	2,32.	2,74.	1,94.	2,51.	3,09.
Respondent's age					
	A man needs to have work	It is degrading to rake money without work	People who don't work become lazy	It is a duty to work	Work is a priority
25 to 30 years	2,38.	2,79.	2,18.	2,66.	3,16.
31 to 40 years	2,42.	2,82.	2,02.	2,54.	3,19.
41 to 50 years	2,33.	2,73.	2,03.	2,42.	3,06.
51 to 65 years	2,17.	2,59.	1,88.	2,28.	2,88.
Respondent's employment					

	A man needs to have work	It is degrading to rake money without work	People who don't work become lazy	It is a duty to work	Work is a priority
employee	2,29.	2,65.	1,96.	2,42.	3,04.
self-employed	2,43.	2,84.	2,10.	2,76.	3,07.
unemployed	2,11.	2,53.	1,85.	2,18.	2,70.
state sphere	2,16.	2,45.	1,81.	2,10.	2,68.
private sphere	2,23.	2,71.	1,96.	2,43.	3,05.
Size of place they live					
	A man needs to have work	It is degrading to rake money without work	People who don't work become lazy	It is a duty to work	Work is a priority
0 -5.000 people	2,19.	2,47.	1,92.	2,31.	2,85.
5.001 -20.000 people	2,16.	2,43.	1,79.	2,16.	2,74.
20.000 and more	2,25.	2,76.	1,97.	2,40.	2,96.

Source: EVS

Analysis of values according to age distribution of respondents shows that especially older respondents have much more responsibility towards society compared to their younger colleagues. A level of agreement with all values is growing, with small exceptions, together with growing age and it is the highest in the age group of 51 - 65 years. In vast majority of cases, responsibility towards society is growing with age step by step - the youngest respondents have the lowest responsibility, the oldest ones have the highest responsibility. An exception is the statements „One has to have employment (work) to be able to develop his skills“ and „It is degrading to get money without having to work for it“, which show the lowest agreement of people aged 31–40, whereas in remaining cases, the growing trend preserves.

If we look at respondents from the respect of their employment and also employer, we can see a clear systematic difference. In all cases, employees agree with the socially responsible statements more than people who are self-employed. People who work in the public sphere tend to agree with the statements more than people from the private sphere.

A systematic and a clear difference can be also found among respondents when we classify them according to a size of place they live. People in the medium-size towns (5 001–20 000 people) agree with the socially responsible statements the most, the second place goes to people from the smaller towns (less than 5 000 people), and people of big towns agree with the socially responsible statements the least (above 20 000 people).

Concerning the responsibility towards society, respondent's gender definitely doesn't work the same as the polarization influence. But respondents differ in their opinions according to education, age, employment, employer and a size of place they live.

4.7 Division of male and female roles

Socially based division of roles between men and women is an elementary problem of the socially scientific researches. It is therefore not surprising that even the selective investigation EVS contains a whole range of questions that look into the matter. From the wide variety of questions regarding a role of marriage or family, homosexual marriages and other gender-related topics, we have chosen just ten values concerning men, women and their position on labour market.

It concerns the following statements:

- Children suffer when their mother is employed.
- Employment is a good thing but what most people really long to have is a home and children.
- Taken together, family life suffers, if a woman is employed full-time.
- A job of a man is to earn money, a job of a woman is to look after children and household.
- Taken as a whole, men are better political leaders than women.
- University education is more important for boys than girls.
- Taken together, men are better bosses of companies than women.
- One of my main life goals is my parents would be proud of me.
- At the time of few job opportunities, employers should prefer Czechs before immigrants.
- At the time of few job opportunities, men have a higher right to work than women.

Respondents assessed the statements of a scale from 1 to 5, where 1 mean "I absolutely agree" and 5 meant "I absolutely disagree". For space reasons, respondents' replies were placed into two tables - 4.5 and 4.6. Figures presented in the individual boxes express arithmetic average of respondents' replies. The lower the number in the box is, the more the respondents agree with the statement. The higher the number is, the less the respondents agree. The statements in the tables are only in a shorter form.

A bit surprisingly, we can see from the table 4.5 that men, just like women, agree about the same with sayings that children and family suffer when a woman works, and that a woman does not really long for working and she prefers a home and family. Differences between genders can be seen in statements regarding a role of men and women (women agree with their care role slightly less than men) and a statement about their talent for political work (again, women agree with the statement slightly less than men).

But we can also see from table 4.5 that the higher education a respondent has, the less he agrees with the statements expressing inequalities between men and women. People with higher education also agree less with saying that children and family suffers when mother works, and they also disagree with the statement that men should be providers or better political leaders. They also do not agree with the statement that women long more for home and children than a career.

When dividing respondents according to age, there is a clear shift towards less agreement with the growing age of respondents. Respondents from the youngest age group disagree with the statements the least; here we expected more equal opinions concerning gender, which was confirmed. Respondents between 30 and 39 agree a bit more, and it is even more for respondents between forty and fifty. Then there is a slight turn - the oldest respondents aged 51 and 65 agree with the gender equalitarian statements a bit less than previous age category. One exception is a statement about men being better political leaders. For this statement, it is not possible to see any clear age-conditional trend.

Employees agree more often than the self-employed with the statements that a woman longs for a home and a man are better politicians. Compared to that, the self-employed agree more often than employees with the statements that children and family suffer due to mothers' work. When comparing the state and private spheres, the statements of respondents of both groups are almost equal, except for an opinion on whether it is a job of a man to earn money. In this case, employees from the private sphere agree with the statement more.

People living in big towns above 20 000 people agree with the statements less. People from the medium size towns usually agree with the statements a bit more than people from small towns of up to 5 000 people.

Table 4.5 Male and female roles concerning position on labour market (part 1)

Respondent's gender					
	Children suffer when their mother is employed	Women long for home and children	Family suffers when women work	It is a task of a man to earn money	Men are better politicians
man	2,74.	2,13.	2,61.	2,41.	2,53.
woman	2,73.	2,09.	2,59.	2,54.	2,74.
Respondent's education					
	Children suffer when their mother is employed	Women long for home and children	Family suffers when women work	It is a task of a man to earn money	Men are better politicians
Primary school	2,48.	2,04.	2,41.	2,20.	2,51.
apprenticeship	2,60.	1,96.	2,46.	2,29.	2,63.
maturita examination	2,81.	2,15.	2,68.	2,60.	2,66.
University	2,94.	2,32.	2,78.	2,81.	2,79.
Respondent's age					
	Children suffer when their mother is employed	Women long for home and children	Family suffers when women work	It is a task of a man to earn money	Men are better politicians
25 to 30 years	2,88.	2,30.	2,83.	2,59.	2,65.
31 to 40 years	2,82.	2,21.	2,65.	2,56.	2,64.
41 to 50 years	2,73.	2,11.	2,55.	2,52.	2,74.
51 to 65 years	2,76.	2,14.	2,65.	2,54.	2,69.
Respondent's employment					
	Children suffer when their mother is employed	Women long for home and children	Family suffers when women work	It is a task of a man to earn money	Men are better politicians
employee	2,83.	2,18.	2,68.	2,58.	2,69.
self-employed	2,68.	2,26.	2,56.	2,59.	2,79.
unemployed	2,64.	2,01.	2,52.	2,39.	2,61.
state sphere	2,77.	2,08.	2,65.	2,57.	2,69.
private sphere	2,74.	2,12.	2,59.	2,47.	2,61.
Size of place they live					
	Children suffer when their mother is employed	Women long for home and children	Family suffers when women work	It is a task of a man to earn money	Men are better politicians
0 -5.000 people	2,74.	2,04.	2,54.	2,40.	2,57.
5.001 -20.000 people	2,66.	1,98.	2,51.	2,46.	2,73.
20.000 and more	2,76.	2,20.	2,67.	2,56.	2,68.

Source: EVS

As shown in table 4.6, compared to men, women agree less with the statements that university education makes more sense in case of boys. According to the authors DiPrete and Buchmann

(2013), this is also one of the reasons why women get to universities more often than men. When investing into education, parents no longer prefer the first born children or even sons (more information in chapter 2 about reproduction of education inequalities in the Czech Republic).

Women also agree less with men being better bosses than women and that, in case there are not enough job vacancies on labour market, men should take preference before women. On the contrary to that, women strive more for their parents to be proud of them, and they suppose employers should give preference to Czechs before foreigners.

An influence of education can be, as in many previous cases, described very briefly. The higher education a respondent has, the less he agrees with the statements presented. Therefore, education serves as a propagator of equality between genders and nations. More educated people do not prefer sons in education, they don't think men would be that better bosses compared to women to be given preference when employing staff for job vacancies, or that Czechs should be given preference before foreigners. The higher the education, the higher effort there is to satisfy the parents. It seems that respondents have a feeling that they have already satisfied their parents enough by completing higher education.

Age of respondent has just the opposite effect on the values presented in the table 4.6. The older the respondent is, the more he agrees with the presented inequality statements. The oldest respondents aged 51-65 agree the most of all categories with the preference of men before women concerning their fitness for university education, leading companies or a need of employment. They also strive the most of all for their parents to be proud of them, and most of all, they would also prefer the Czechs before foreigners in terms of employment.

Compared to employed people, the self-employed are also more gender equal. The self-employed agree with all statements concerning the importance of education, abilities of men to lead, preference of men before women and Czechs before foreigners. Concerning the last two statements, there is even stronger agreement of people who are unemployed for some reason, which is expected.

Employees in the private sphere, compared to employees from public sphere, agree with the statements about the importance of university education for men and men abilities to lead. On the other hand, employees from the state sphere, when compared to those from the private sphere, agree more with preference of Czechs before foreigners.

Table 4.6 Male and female roles concerning position on labour market (part 2)

Respondent's gender					
	University education is more important for boys	Men are better bosses	I want my parents to be proud of me	At work, the Czechs have priority before foreigners	Men have a priority before women
man	3,04.	2,65.	2,12.	1,83.	3,35.
woman	3,20.	2,92.	2,03.	1,69.	3,59.
Respondent's education					
	University education is more important for boys	Men are better bosses	I want my parents to be proud of me	At work, the Czechs have priority before foreigners	Men have a priority before women
Primary school	3,00.	2,74.	1,86.	1,71.	3,21.
apprenticeship	3,04.	2,73.	2,05.	1,59.	3,33.
maturita examination	3,18.	2,83.	2,11.	1,73.	3,58.
University	3,30.	2,97.	2,11.	2,13.	3,78.
Respondent's age					
	University education is more important for boys	Men are better bosses	I want my parents to be proud of me	At work, the Czechs have priority before foreigners	Men have a priority before women
25 to 30 years	3,35.	2,88.	2,06.	2,10.	3,78.
31 to 40 years	3,12.	2,88.	2,22.	1,93.	3,59.
41 to 50 years	3,16.	2,82.	2,15.	1,75.	3,56.
51 to 65 years	3,13.	2,82.	2,05.	1,66.	3,53.
Respondent's employment					
	University education is more important for boys	Men are better bosses	I want my parents to be proud of me	At work, the Czechs have priority before foreigners	Men have a priority before women
employee	3,16.	2,84.	2,14.	1,80.	3,61.
self-employed	3,27.	2,93.	2,20.	2,16.	3,80.
unemployed	3,10.	2,76.	1,96.	1,64.	3,34.
state sphere	3,13.	2,84.	2,04.	1,68.	3,53.
private sphere	3,07.	2,76.	2,05.	1,73.	3,50.
Size of place they live					
	University education is more important for boys	Men are better bosses	I want my parents to be proud of me	At work, the Czechs have priority before foreigners	Men have a priority before women
0 -5.000 people	3,08.	2,75.	1,98.	1,73.	3,42.

5.001 -20.000 people	3,15.	2,82.	2,05.	1,68.	3,33.
20.000 and more	3,16.	2,85.	2,13.	1,79.	3,61.

Source: EVS

If we take a look at the replies of respondents according to a size of municipality they live in, we can see several differences. In smaller towns more than in the bigger ones, respondents think that university education is more important for boys than for girls, that men are better bosses than women and that people should make effort for their parents to be proud of them. On the other hand, when deciding who to prefer while filling job vacancies, whether men before women, or Czechs before foreigners, the least tolerant are residents of medium size towns (5-20 000 people), followed by people from small villages (to 5 000 people) and the most open people in terms of equal work opportunities are those from bigger towns above 20 000 people.

Clear dividing lines in the area of gender equality on labour market are a level of achieved education and respondent's age. Surprisingly, there are no significant differences depended on gender. Men and women have similar opinions in many cases.

4.8 Individual responsibility versus state paternalism

Respondents of the EVS scientific research also had to put themselves on a scale from 1 to 10 according to which opinion about the social concept is closer to them. They were given five pairs of opposite statements, while the first one was valued by number 1 and the second one by number 10. A respondent had an opportunity to choose a limit value (1 or 10), or anything between. The closer his answer was to one of the utmost values, the more he agreed with one of the two statements.

There were the following pairs of statements:

- Individuals should take over more responsibility to be able to take care of themselves. (1)
- State should take over more responsibility and make sure everyone is taken care of. (10)

- The unemployed should have to accept any type of work available or lose the unemployment benefits. (1)
- The unemployed should have a right to reject employment they do not want to do. (10)

- Competition is good. (1)
- Competition is damaging. (10)

- Incomes should be more equal. (1)
- Efforts of an individual should be supported more. (10)

- Private ownership of business and industry should increase. (1)
- State ownership of business and industry should increase. (10)

Table 4.7 presents the replies of respondents in a form of arithmetic average. The lower number there is in the table the more the respondent agrees with the first from the pair of presented statements. The higher the number is, the more the respondent agrees with the second statement presented. The statements are put into the table only in their shorter versions.

Considering a role of state in society, men significantly differ from women. Men, more often than women, incline towards individual responsibility, possibility of the unemployed to refuse work, benefits of existing competition, deserve incomes and private ownership of industry more. Their opinions could be called individualistic. Compared to that, women incline more to state responsibility, forced employment of the unemployed, disadvantages of existing competition, more equal incomes and greater state ownership of industrial businesses. Their opinions could be therefore called state-paternalistic.

In we look at respondents from the respect of their highest completed education, we can find a sharp dividing line between secondary education with apprenticeship and secondary education with maturita exam. The first group includes people with primary education and apprenticeship, the second one includes respondents with maturita or a university.

The group of the less educated people agrees more with state responsibility and forced employment of the unemployed. They also do not believe in the benefits of competition; they call for more equal incomes and a higher proportion of state industry. We can therefore say that people with lower education have significantly paternalistic opinions, on the other hand, those with higher education have more individualistic opinions.

Concerning the age groups, it is not possible to identify a single trend. We therefore compared the youngest group (25-30 years) with the oldest one (51-65 years). In the respect of

responsibility, younger group tends to incline to state, whereas the oldest group prefers individual responsibility. Also, the intermediate groups (31-50 years) prefer a responsibility of an individual. In terms of forced employment of the unemployed, both groups are similar. People above 40 think competition is useful more than younger people. All age groups think that incomes should be more for credit, although these opinions are weaker in the youngest and the oldest age groups compared to the middle-age groups. Concerning the opinion about whether the ownership should be more private or state one, respondents differ according to age - younger people incline more towards private ownership, the older the respondent is, the more s/he prefers state ownership.

Table 4.7 Opinions regarding social arrangement and state regulation

Respondent's gender					
	Responsibility goes to an individual / state	The unemployed have to / don't have to work	Competition is good / bad	Incomes more equal / as a credit	Ownership of industry private / state
man	4,59.	3,78.	2,94.	5,43.	4,89.
woman	4,90.	3,67.	3,21.	4,85.	5,22.
Respondent's education					
	Responsibility goes to an individual / state	The unemployed have to / don't have to work	Competition is good / bad	Incomes more equal / as a credit	Ownership of industry private / state
Primary school	5,42.	3,63.	3,25.	4,42.	5,19.
apprenticeship	5,26.	3,65.	3,30.	4,64.	5,47.
maturita examination	4,50.	3,76.	3,05.	5,17.	5,02.
University	4,13.	3,72.	2,73.	6,03.	4,39.
Respondent's age					
	Responsibility goes to an individual / state	The unemployed have to / don't have to work	Competition is good / bad	Incomes more equal / as a credit	Ownership of industry private / state
25 to 30 years	4,94.	3,80.	3,25.	5,11.	4,41.
31 to 40 years	4,63.	4,05.	3,31.	5,51.	4,90.
41 to 50 years	4,64.	3,87.	2,94.	5,21.	4,92.
51 to 65 years	4,73.	3,79.	3,01.	5,03.	5,16.
Respondent's employment					
	Responsibility goes to an individual / state	The unemployed have to / don't have to work	Competition is good / bad	Incomes more equal / as a credit	Ownership of industry private / state
employee	4,65.	3,89.	3,09.	5,25.	4,97.
self-employed	3,62.	3,60.	3,05.	6,21.	4,48.
unemployed	5,02.	3,56.	3,12.	4,76.	5,25.

state sphere	4,84.	3,56.	3,06.	5,16.	5,41.
private sphere	4,76.	3,96.	3,12.	5,10.	4,94.
Size of place they live					
	Responsibility goes to an individual / state	The unemployed have to / don't have to work	Competition is good / bad	Incomes more equal / as a credit	Ownership of industry private / state
0 -5.000 people	4,73.	3,69.	3,17.	5,01.	4,97.
5.001 -20.000 people	4,99.	3,32.	2,85.	4,60.	5,16.
20.000 and more	4,72.	3,90.	3,16.	5,31.	5,14.

Source: EVS

Comparing employees and the self-employed is simple. In all cases, the self-employed have more individualistic opinions, whereas the employed are - sometimes more and sometimes less - prone to the paternalistic role of a state. The biggest difference, almost of one point on the ten-point scale, shows in the opinion on the creditability of incomes. According to employees, it should be more equal, according to the self-employed, it should be more for credit.

An interesting comparison is offered by looking into the answers of employees in the state and in private sphere. If we assumed that state employees would have the state paternalistic values absolutely, we would be very wrong. Employees in state sphere think more than employees in private sphere that the unemployed should be forced to accept any work, and they agree with the statement that competition is useful. Employees of private companies incline towards personal responsibility of an individual but they require slightly more equalitarian incomes. As expected, private employees also wish more than the state ones for the Czech industry to remain in the private hands.

It is the residents of the biggest (above 20 000 people) and the smallest (below 5 000 people) municipalities who incline towards responsibility of an individual the most. The unemployed would be forced to work the most by the people living in the medium size towns (5-20 000 people). The same group of respondents, therefore people from the medium size towns, is the keenest on the existence of competition, and they wish for more equal incomes. Private ownership is the most supported by people from the smallest municipalities (up to 5 000 people), which can be explained by a greater number of small businessmen and agriculture workers in small municipalities.

Clear polarization factors include gender, education and age in this case. According to those characteristics, it is possible to find clear dividing lines distinguished by groups of people with very different opinions.

4.9 Which characteristics of respondents polarize Czech society?

In previous chapters, we introduced several groups of values and opinions from European research of values. Complete presentation of data and their changes in time can be found, if interested, in the publication Values and positions...(2018), which is available in electronic form.

In the conclusion of this chapter, we would like to summarize the basic dividing lines, which can be currently identified in Czech society. We therefore summarize which of the used characteristics of a respondent (gender, education, age, employment, employer, place of residence) distinguish respondent's opinions strongly enough.

Gender

- For women, family is a priority before work
- Men are more ambitious, they want to provide for family
- Women need more free time
- Women don't agree that men are better bosses or leaders
- Women prefer paternalist approach of state compared to individual responsibility of an individual

Education

- The more educated people are the more they think about the individual aspects of their lives
- More educated people trust the others more
- Those with higher education want more pleasant employment considering a good salary and working hours, but they also look for a possibility of self-realization
- People with a university degree show less appreciation towards society
- More educated people have more equalitarian opinions concerning the roles of men and women

- People with lower education (elementary, apprenticeship) prefer paternalistic approach of a state, whereas people with higher education (maturita, university) incline more to the individual responsibility of individual

Age

- People below 40 show higher trust towards different people (other faith or nationality)
- People above 40 trust more to people they know and family members
- An importance of a good salary as well as efforts to get some self-realization at work decreases with age
- The youngest age group does not consider it good when work is connected with a lot of responsibility
- Older people show a higher level of appreciation towards society, and consider it to be their duty to pay it back to society by their hard work
- Younger people have more equal opinions as for gender

Employment

- Self-employed people are motivated more by inner satisfaction at work
- Employees are more often motivated to work by the material aspect of work
- Employees record a higher level of appreciation towards society
- The self-employed people incline more towards individual responsibility of an individual

Employer

- Employees who work in the state sphere look for satisfaction and an opportunity for self-growth at work
- Employees working in the private sphere are motivated by good wages and good working hours
- Employees in state sphere are more responsible towards society, they feel it is their duty to repay it their debt by work

Size of place they live

- Trust in all groups of people decreases with a growing size of municipality

- The highest level of responsibility towards society is seen in respondents who live in the medium-size towns

It emerges from the above described that the main factors that influence the opinions of respondents are their age and achieved education. Moreover, both of those characteristics go hand in hand. Educational structure of Czech society changes and younger groups of people achieve higher education compared to previous generations. (For more information about development of educational structure, see chapter 2).

It can therefore be expected that polarization of society to the dividing line of the younger / the older and those less educated / those more educated will also take place in future.

Conclusions and recommendations

The study we handed in analysed the most important factors of Czech society polarization from the perspective of achieved incomes as well as from the perspective of opinions, positions and values. It shows that the most important factor of polarization is achieved education, which occurs throughout the study. Completed education is a key factor of received income. There is a strong reduction of educational inequalities in Czech society, when children of the less educated parents have a significantly lower chance of completing a higher level of education compared to children of more educated parents. Besides quantitative inequalities in a form of a degree of education, there are also qualitative inequalities (quality of school on a given education level).

A primary recommendation emerging from our study is therefore **pay enough attention to changes of our education system, so that it provides (i) the maximum possible development of potential of every child, pupil and student, and at the same time (ii) to decrease dependency of achieved education on socio-economic environment a child grows up in.**

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