## TECHNICKÁ UNIVERZITA V LIBERCI

### Hospodářská fakulta

Studijní program: B 6208 – Ekonomika a management

Studijní obor: Podniková ekonomika

Stárnutí pracovní síly a její vliv na důchodový systém a zaměstnaneckou politiku ČR

Ageing of workforce and its impact on the pension system and employment policy in the Czech Republic

BP - HF - KPE - 2008

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Huddersfield, UK

Počet stran: 64 Počet příloh: 15 stran

Datum odevzdání: 29. 04. 2008

## TECHNICKÁ UNIVERZITA V LIBERCI

## Hospodářská fakulta

Katedra podnikové ekonomiky

Akademický rok 2007/2008

## ZADÁNÍ BAKALÁŘSKÉ PRÁCE

pro Pavlu ŠKORPILOVOU

program č. B 6208 Ekonomika a management obor č. 6208R085 Podniková ekonomika

Vedoucí katedry Vám ve smyslu zákona č. 111/1998 Sb. o vysokých školách a navazujících předpisů určuje tuto bakalářskou práci:

Název tématu: Stárnutí pracovní síly a její vliv na důchodový systém a

zaměstnaneckou politiku ČR

Ageing of workforce and its impact on the pension system

and employment policy in the Czech Republic

#### Pokyny pro vypracování:

- 1. Teoretický rozbor procesu populačního stárnutí v ČR i ve světě
- 2. Charakteristika českého penzijního systému
- 3. Psychologie stárnoucího pracovníka
- 4. Metodologie výzkumu
- 5. Výsledky výzkumu
- 6. Zhodnocení výsledků studie a návrhy pro zlepšení

Rozsah práce: 50 - 70 stran textu + nutné přílohy

Forma zpracování: tištěná

#### Seznam odborné literatury:

Coleman, S. D. & Moyers, P. A. (2004), 'Adaptation of the older worker to occupational challenges', IOS Press, Work 22, pp. 71-18, [online] Available at: Metalib [Accessed 3 January 2008].

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<a href="http://www.oecd.org/document/42/0,3343,en\_21571361\_34628784\_36104426\_1\_1\_1\_1\_1">http://www.oecd.org/document/42/0,3343,en\_21571361\_34628784\_36104426\_1\_1\_1\_1\_1</a>, 00.html> [Accessed 3 January 2008].

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Konzultant: Mr. Robert R. Trick (University of Huddersfield)

Termín zadání bakalářské práce: 31. 10. 2007

Termín odevzdání bakalářské práce: 29. 04. 2008-08-19

Doc. Dr. Ing. Olga Hasprová děkanka Doc. Ing. Ivan Jáč, CSc. vedoucí katedry

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#### **ABSTRAKT**

Důchodové systémy, způsoby jejich financování a podmínky, kterými je celý systém řízen jsou základem sociální politiky každého státu. Proto je velmi důležité vytvořit takový systém, který by byl finančně udržitelný jednak z hlediska státního (jako přerozdělovače penzí) a zároveň dostatečný pro jednotlivce, který bude důchod v budoucnu pobírat. A právě v dnešní době, kdy silným poválečným ročníkům zbývá jen několik let do důchodu a počty mladých budoucích přispěvatelů do státního rozpočtu také nerostou ale spíše nelineárně klesají, je otázka udržitelnosti českého penzijního systému více něž vhodná. Proto bude nezbytné znovu zvážit výkonnost a vhodnost současného penzijního systému, a v souvislosti s plánovaným zvýšením věku odchodu do důchodu přehodnotit postoje a stereotypy o stárnoucí populaci (50+) a snažit se vytěžit co nejvíce z pracovního potenciálu, který stále ještě mají.

Tato práce se také, mimo jiné, snaží zjistit, co si právě tato generace (50+) myslí o současném důchodovém systému a o celé záležitosti populačního stárnutí a jak sami sebe vnímají z hlediska produktivity. Průzkum mezi dotazovanými také zjišťoval, jaké věkové hranice pro odchod do důchodu byly nejčastěji navrhovány v závislosti na dosaženém vzdělání. Pomocí ANOVA testu však nebylo prokázáno, že by stupeň dosaženého vzdělání měl přímou vazbu na navrhovaný věk. Je však nutné si uvědomit, že tato zjištění nemohou být generalizována z důvodu poměrně nízkého počtu dotazovaných.

Klíčová slova: populační stárnutí, důchodový systém, aktivní stárnutí, stereotypy, produktivita

**ABSTRACT** 

Pension systems, ways of its financing and conditions by which the system is abided create

the heft of social policy in every state. It is extremely important to create such system which

is sustainable from state view of pension redistributor as well as from the view of an

individual, who will be the potential future receiver. And exact this question of sustainability

of Czech pension system occurs nowadays, when the strong baby-boom generation is ageing

and number of children who will be the future pension contributors is falling. Therefore the

rethinking of the current pension policy is needed as well as changing attitudes and

stereotypes about the ageing population and try to make the best of the potential they still

have.

This paper, among others, presents what exactly does the generation (50+), which is involved

the most, think about the current pension system and the whole issue of population ageing.

The research tries to find out what are the retirement age limits proposed by the respondents

compared to their level of education. As ANOVA test demonstrated, no significant

connections between level of education and retirement age proposals were found. However

the reader should bear in mind, more researches is needed to conduct and more respondents to

ask to gain more results which could be then generalised.

Key words: population ageing, pension system, active ageing, stereotypes, productivity

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## **ACKNOWLEDGEMENTS**

That way, I would like to thank my personal tutor for his supervision and advices he gave me during the whole year and for his personal approach as well. Secondly, I would like to express my grateful thanks to my family and all friends for their support and understanding and last but not least all participants involved in my research.

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#### INTRODUCTION

Two thousands years ago, there were living only about 300 millions of people on the Earth. Sixteen centuries later, it is estimated the population raised to 600 millions and since that time the process of population growing started to speed up. In 1750, there were approximately 791 millions inhabitants on the Earth and only two centuries later the number grew to 2, 5 billions. (Huwu.org, no date) Since the fifties, the growth rapidity accelerated and in 2007 the world population climbed up to 6, 6 billion. (Prb.org, 2007; Cia.gov, 2008). The explanation of this fast development could be seen in considerable increase of life expectancy thanks to its level of living standards - the better hygiene and medical care, urbanization, liquidation of illiteracy, but also fundamental social changes in the world. But the second half of twentieth century was not fundamental only for population growing but also for population ageing in the Europe and other developed countries. The absolute number of seniors aged 65 and more increased from 46 millions in 1950 to 112 millions in 2000 and their share on the total population raised from 8% to 14%. In next fifty years, the population ageing becomes a dominant demographical process in the Europe (Mašková, 2003) and it is estimated, the seniors will create the only large growing age group, although the current level and estimated progress of ageing will differ in particular European states. It is reflecting their heterogeneous demographical situation in 20<sup>th</sup> century which is flowing partly from different times when the demographical transition was ended and partly from three main processes which are determining the development of age structure – fertility (birth rate), mortality (death rate) and migration. Prognostic statements from each states showed, that the heterogeneity among these states will still prevail. But it is also evident; the ageing process will be characteristic and unavoidable for all European countries. (Mašková, 2003)

The reactions on expected progressive ageing but also on the fact, that the following generations will be healthier and more educated than before, is the new concept of society approach to population ageing, which is promoted by OSN and other international organizations. This whole concept is based on the changes in attitudes towards older people and is coming out from the public support allowing this generation to engage in the society and give them the chance to continue in the economical activity and have a full-value life in any other directions.

In terms of ageing, increase of social security costs and health care is discussed very often as well. In the Czech Republic, the expenditures on the basic components of social-health system defined as a GDP share raised gradually, but steady since 1990. In 2001, this number counted 21, 7 % of GDP (3, 8 % more compared to 1990). The deficits in these areas are not specific only for the Czech Republic, but also other European countries are trying to cope with this problem. So it is no wonder, we are meeting very often with claims, that the ageing society is first of all financially demanding society. But these opinions are just reflecting the current medial debates about ageing of Czech population which are presented mainly in negative words such as crisis or problem. (Vidovičová and Rabušic, 2003) and we cannot blame the current or future senior generations from the non effectiveness of the social and any other policy. Therefore it will be needed to introduce pension and other reforms to synchronize the requirements of increasing ageing generation with stagnating or declining younger generation in order to sustain their level of living and public finances as well.

The following study will be divided into five main sections. In the first one, ageing backgroung is provided, which is followed by description of the Czech pension system and characteristics and stereotypes about older workers which are influencing the employment policy. Next chapter deals with different research methods and explains more narowlly how and under which conditions was the research conducted. Afterwards chapter three describes the findings and data gained from the primary research in order to clear the objectives and verify the hypothesis, which were stated. Finally, the paper is finishing with discussion of the findings related to other literature and sources and conclusion.

#### 1 LITERATURE REVIEW

The aim of the literature review and this study is to prove the seriousness of the ageing of workforce and the whole population and its possible impacts, especially on the employment policies and pension systems, which will notably influence our future and mainly future of our children. The better medical care and new medical treatments are increasing our life expectancy, which is no doubt positive information, but on the other hand if we will live much longer we will be probably expected to work longer as well. And if the share of older employees in the company increases significantly, will the productivity of the firm be the same or even will the competitiveness be threatened because of the lack of young and therefore more efficient workers? As a result of this demographical evolution it will be necessary to get ready for the changes that may occur in connection with this problem and try adapting to them. In this chapter, first definition of ageing, demographical background and statistical data about population ageing will be provided. Then the pension system in the Czech Republic will be introduced and possibilities of its financing will be mentioned. In last section of the first part of the Literature Review, the question of the most suitable retirement age will be discussed as well as proposals of Czech governmental parties to this topic. Second part of the Literature Review focuses on stereotypes thought about older people and tries to provide facts about their abilities and characteristics such as productivity, confidentiality with using the informational technologies etc. Finally, the employee policy towards maximizing the use of older human capital will be introduced.

## 1.1 Ageing Background

#### 1.1.1 Ageing

Aging is a natural characteristic of each organism and is considered not only as an attribute of an individual, but of a population as well. This fact basically means that the ageing of population is not a biological process, as in case of individuals, but a structural process. The populations are ageing structurally because its composition is changing in time; it means the proportion of people who are considered as old is increasing. The most important aspects influencing this demographical process are: birth rate (number of live births per 1000 of the population), mortality (number of deaths per 1000 of the population) and migration (movement of people in and out of specific area or country).

"Demographical changes showed us, the modern population tends to demographical transition, what means that historically high rates of birth and mortality are gradually decreasing so as to the end of the transition could be these rates on low and balanced levels."

(Rabušic, 2002)

And because the low birth rates lead to population aging, this phenomenon becomes legitimate effect of finished demographical transition = if relatively too little children is born and the mortality is stabilized (or is even decreasing), the age structure gains low share of young population and higher shares of senior population.

Old age is quite inexplicit definition, but each state should make clear about its presentation mainly due to its administrative needs, because it's necessary to chronologize the life into clearly given time slots, which present one of the main principles for organising the social policy and creates basic rule for distribution of allowances in the future.

There is no general agreement on the age at which a person becomes old, so we assume, according to the definition of old - age dependency ratio of the OECD, the age 65 years and more as a beginning of old age. (Society at a glance: OECD Social indicators, 2006)

#### 1.1.2 World ageing

The ageing of world population is a result of decreasing birth rate, increasing of life expectancy, better medical care and continuous improving of living conditions during the second half of the twentieth century. In these days, the leading position in ageing ranking hold mainly developed countries (such as Europe, U.S.A., Japan etc.) due to baby boomers generation. According to OSN report, the world population reached 6 billion people in second half of the year 1999, in 2003 it was 6,4 bill. and it's estimated that the number of people will boost to almost 8, 9 billion in 2050. (Osn.cz, 1998) In the same year, almost two bill. of the whole population will be aged 60 or more. (Bloom and Canning, 2006) As OSN also suggests, Europe will remain the main zone afflicted with ageing of population. The proportion of elderly people will increase from 20% in 1998 to 35% in 2050. By this time, every third person will be older than 60. As example McDonald and Potton referred, in 1990 more than 34% of German population was aged 50 and over and this number is predicted to increase on 47% by 2020. Very similar situation is estimated in United Kingdom - from 31, 2% to 38% by the same year. (McDonald and Potton, 1997)

#### 1.1.3 Ageing in the Czech Republic

Demographical ageing of Czech population had quite smooth trend, which was presented mainly by decrease of population aged 0-15, and very slow increase of elderly people. But nowadays, it is still more distinctive that the number of people aged 65 is growing, especially because of retiring the strong post-war generation, in other words baby boomers. According to the middle estimates, designed by the Czech Statistical Office, the number of people between 65 and 74 is guesstimated to raise 1,7 times till 2050, the number of people aged 75-84 will increase more than twice, but the most significant grow will be probably among people aged 85 and over, which will increase even five times. As Svobodova pointed out, the dramatic growth of the last and the oldest group will have many important consequences for society. Especially these people are in worse health state, therefore they demand more social and health care than younger people in retiring age. (Svobodova, 2005)

Table 1 Prediction in population structure according to age in years 2002-2050

	0-14	15-64	65+
2002	1 589 766	7 195 541	1 417 962
2005	1 487 148	7 302 144	1 446 681
2010	1 400 028	7 286 202	1 596 812
2015	1 426 352	7 011 496	1 864 146
2020	1 408 644	6 786 952	2 088 333
2025	1 346 384	6 669 506	2 201 310
2030	1 274 155	6 520 205	2 308 073
2035	1 219 739	6 337 422	2 399 918
2040	1 197 000	5 964 564	2 633 554
2045	1 190 477	5 569 751	2 862 020
2050	1 173 004	5 309 251	2 956 079

Available at: Svobodova, (2005)

On the other hand, middle estimates from the Department of Demography at Charles University predicates 33% people aged 65+ in 2050 (1,7% more than CSO announced). (Rabušic, 2002) All these predictions and prognoses about future numbers of seniors are obviously based on past and current surveys and estimates and the real development, mainly in long run level, could differ. But the question still remains, if it is better to understand this phenomenon as a serious problem and threat or as a challenge which we need to face. The awareness of population ageing is raising and this topic became a very relevant to many scientific analyses, political declarations and medial reports. The approaches to ageing differ, but in general it is considered as a fundamental problem of future economic and social development in many developed countries. (Tomeš, 2005). It is also assumed, that ageing will endanger the industry modernization, decrease the competitiveness of the economy and will increase the costs of labour force. (Muffels, 1993) As Tomeš claims, thanks to workers experiences, trainings and other skills gained during the employment and also because of individuals earnings which are growing over time, the theory of human capital foresees that the ageing of population will lead to much higher labour costs. The next and one of the most concerning consequences of ageing will be serious enhancement of public expenditures in form of increasing vested pensions. (Tomeš, 2005) This is derived from the fact, that the main weight of pension and tax financing is dependant on productive employed generation, which is gradually decreasing, while the amount of older people which are recipients of the pension benefits is notably increasing. On the other hand he also argues, that population ageing is perceived as a natural, cyclical and final process which can not be responsible for failure of social and other systems. The only reason of these likely problems he mentioned is inadaptable and unsuitable economical policy which cannot cope with dynamic demographical changes. (Tomeš, 2005) According to Ministry of Finance, it will be necessary to implement efficient reforms in areas of pension schemes, social security benefits, health care services and labour market in order to avoid deterioration in public finance sector. If this does not happen, expenditures on infrastructure, research and development and on other sectors which contribute to better economical performance and growth could be shorten in aid of social transfers and consumer expenses. It could also lead to sensitive decline of employment resulted with negative impact on potential product and economic growth rate as well. (Mfcr.cz, 2005)

According to Gruber and Wise 1997, Tomeš is arguing that the social systems stability is influenced mostly by economical activity on labour market than demographical ageing rate. The main reason of high deficits is not the population ageing or increased number of seniors, but decline of employment rates and early retirements, which are now more frequent. Nowadays, older workers are leaving their jobs earlier. In some countries, working participation of men aged 60-64 declined in last 30 years about 75%. The facts of early retirements are also supported by OECD. In its report about Czech ageing and employment policies, the OECD stated, that in 2002, more than 54% of men aged 60 was retired and almost 60% of women aged 56. (Oecd. org, 2004) Retirement age is just politically defined and changeable border, which essentially influences the financial stability of the economy. In this regard, the pensions burden the fiscal system directly twice. Firstly, the people stop working thereby they also stop to create values and pay taxes. Secondly, they start to draw the pension contributions from the state.

#### 1.2 Pension systems

#### 1.2.1 Classification of pension systems according to its financing

For better understanding of types and ways of financing pensions, we must distinguish between PAYGO schemes (redistributive approach) and funded schemes (capital-base approach). In PAYGO schemes (pay-as-you-go), the generation which is currently in active employment is financing the pensions of contemporary pensioners and the pensions of the current generation will be covered from contributions of future employed generation. This process is also called intergenerational redistribution. In *funded schemes*, the contributions of future retirees are accumulating in an account or fund and can be invested on a financial market to increase the value of the savings, which are then used for paying their pensions. (ILO, 2000) While the revenues from PAYGO are dependant on demographical changes, the revenues from funded schemes are influenced by conditions on financial markets and the funded schemes are more liable to risks on capital markets as well. The prices of stock and other instruments or changes in interest rates can significantly reduce (but on the other hand also increase) savings on individual account. PAYGO is much more resistant to macroeconomic shocks, but in case of large economical crisis, for instance if the employment rate declines dramatically, the stability of this system would be threaten as well. (Mpsv.cz, 2005)

If we consider the pensions from the standpoint, how the contributions are collected and then how they are redistributed, we distinguish between <u>defined benefit plan</u> and <u>defined contribution plans</u>. In *Contribution plans*, the contributory rate, which should be paid, is given and the pension depends proportional on valorisation and amount of contributions, which were paid.

In the *Defined benefit plan*, the amount of old-age benefits is guaranteed and in most cases depends on the period the individual contributed and on certain measure of last earnings. (Whiteford and Whitehouse, 2006) Beside this earnings-related scheme, there exist also flatrate schemes, where all pensioners receive the same pension, no matter how much they earned. The defined benefit plan could be financed both from funded as well as from PAYGO scheme. (Pokorna, 2007)

#### 1.2.2 Pension system in the Czech Republic

The pension insurance in the Czech Republic is following the law no.155/1995 which came into effect on 1.1.1996, but since that time important novelizations were made. (2001, 2002 and 2003). From this pension insurance, not only old-age pensions are provided, but also the disability pension, widow's pensions and orphans pension. The system of pension insurance is based on several principles. One of them is the compulsory participation that means all economically active people are obliged to contribute to this system. In figures, the pension insurance counts 28% from the basis of assessment. (Pokorná, 2007) Other principle is the uniformity of the system. In other words, the conditions for gaining the right to receive an old-age benefit are same also for people from other countries, on the assumption they satisfy them. In order to avoid the influence of inflation and sustaining a corresponding quality of life, every year the pensions are valorized. Last feature of the system is the social solidarity, which means the pensions do not grow linearly with the income, but on the contrary the relatively levels of pensions decline with higher incomes.

As The Ministry of labour and social affairs appointed, the Czech pension system consists of two main pillars:

- The first one presents the compulsory pension insurance, which is financed continuously (PAYGO). This type of pension receives more than 99% of Czech inhabitants, who reached the age in which begins the pension entitlement. For completeness' sake, the pension insurance is paid by employer or the organisation.
- The second pillar contains optional and contributory defined supplementary pension insurance with a state benefit.

The products of commercial insurance companies (especially life assurance etc.) could be also mentioned, but these take just an insignificant share on today's retirees' earnings. The occupational pensions, which are usual in other European countries, do not exist in the Czech system so far.

The old-age pension comprises of two components:

• The basic measurement determined by a flat rate independent on length of insurance period and earnings height. From 1.1.2007 this flat rate counted CZK 1570 per month and from 1.1.2008 CZK 1700.

• The percentage measurement is defined individually from the computational base according to gained insurance period. The percentage measurement now counts 1,5% of the computational base, but the minimum pension percentage measurement will be at least CZK 770 per month. (Mpsv.cz, 2007)

The insured person has a right to receive an old-age pension, if he/she is insured 25 years at least and reached the age limit which is necessary for pension entitlement. If this condition is not realized, 15 years of insurance are enough, but the person must be 65 years old at least.

The old-age pension is a type of pension, which the person is entitled to receive after reaching the state defined age limit and gaining the needed time of pension insurance as said above. In these days, the age limit is 60 years for men and 53-57 years for women, according to brought children. But these limits relate only to people, who gained the age until 31.12.1995. From that time, the retirement age limit is periodically increasing. By men it is growing on two months and by women on four months per each year after 31.12.1995. It is planned, that after 31.12.2012 the retirement age limit will be 63 years for men and 59-63 years for women (5 and more children 59, 3-4 children 60, 2 children 61, 1 for 62 and the women who did not have any children will retire like the man). (Cssz.cz, 2007)

#### 1.2.3 Possibility of future reforms

Nowadays, the most questioning issue is to find out the best way of financing the pension schemes and what kind or mixture of systems is the most suitable for the Czech Republic. The pension expenditures were about 11 % in EU and 8 % in the Czech Republic in 2003. As the professional executives from the Ministry of labour and social affairs suggested, if the current pension situation remains the same, the deficit will reach 4-5% of GDP every year. The system will cumulate the debt of almost 110 % in 2065. (Mpsv.cz, 2005) Many reforms were also introduced in other European, post-communistic countries, such as Hungary in 1998, Poland 1999, Latvia 2001, then Bulgaria, Estonia or Croatia etc. The information, process of implementation and results of current functioning of the reforms in these states could serve as a background for the reforms in the Czech Republic, mainly because of its similarity in history, past central planned economy and relatively similar problems. Both states, Poland and Hungary transformed their old system in new, so called three pillar systems. First one is

based on the redistributive PAYGO system as the Czech. Second presents compulsory insurance using the capital reserves. The last pillar is voluntary pension insurance based on capital reserve approach as well. The Hungarians used in their reform the same principles (one redistribution and two capital pillars). Contributions are paid, according to the social solidarity principle, by both employers and employees. (Kietlinska and Piotrowska, 2004) This transfer, from totally state financed pensions in the past to dividing the responsibility among all participants, should fundamentally influence the state pension expenditures.

As Whiteford reports, in many OECD states the important pension reforms were performed in past twenty years and among others it caused mainly the changes in e.g. indexation of pensions payments, the higher life expectancy was more taken into account, the role of private pensions increased and the higher motivation of later retirement is emphasized. (Whiteford and Whitehouse, 2006) These plans or schemes are managed usually by private financial services, or run by industry's or employers pension funds, which means the system is privatized, but in the Czech Republic the privatization of the system was refused so far. It is also proved, that transformation to private funded schemes (FS) will increase long-term savings and investments and helps to develop the capital market more effectively. (Mueller, 2002) On the other hand, FS contributions could be invested into foreign capital markets and thereby decrease the dependency on the domestic economy. (Mpsv.cz, 2005) Because of its capital market risk, which the individuals bear, the private funded scheme can not exist on its own without any mandatory state scheme which would ensure the basic income and prevent poverty in old age.

"From individual's perspective, the most secure way to provide for resources in retirement is in as diversified a way as possible: across both providers and types of benefits."

(Whiteford and Whitehouse, 2006)

As the professional executives designed, the only way how to persuade the people to save their money for their retirement in private or funded schemes, is to cut down the rate which is each contributor paying to the state in form of pension insurance. These cuts would enable to save the money in FDC (funded defined contribution plan) or other schemes. Next possible solution could be the implementation of two ceilings for paying the insurance rate. The insurance rate from earnings which do not exceed the first ceiling will fully go to the state pension system. The rates from earnings, exceeding the first ceiling but not the second one,

will partly flow into state system and partly to the FDC pillar. Everything which is earned above the second ceiling will not underline the payments to pension schemes. (Mpsv.cz, 2005) Other solution of creating a diversified and effective model proposed by the International Labour Organization is called hybrid system containing four parts or pillars. The first one, "a bottom anti-poverty" pillar, will support everyone "without other means". The second, PAYGO publicly managed defined - benefit pillar, will provide reasonable replacement rate (40 or 50 % of lifetime earnings in average) for all who contributed to the system during their employment. The third one, based on defined contributions, will be also compulsory but only up to given ceiling and it will be managed by the private pension companies. Money from this pillar will then be paid as year rent pension. Last one will be voluntary, defined-contribution based and also managed by private companies. (ILO, 2000) This model seems to ensure good social and anti-poverty protection; diversify the ways of financing, risks and responsibility as well.

The final report of the professional executives referred, there are only three options how to decrease the pension expenditures: cut down the current pensions level, slower valorisation or extension of retirement age (Mpsv.cz, 2005) and additionally penalise the early retirement. The further paragraph will be focused on the last two options, because they appear more realizable and sustainable than the first two, which will probably endanger the disposable income of the pensioners and thereby their quality of life.

#### 1.2.4 Early retirements and retirement age limits

Duval claims, if the early retirement schemes were removed, it would significantly influence the work participation of 55-64 age group, especially in countries with relatively low retirement age (Czech Republic, France, Hungary etc.). From the other side, it is argued, the possibility of early retirement allows covering the risks of exclusion from the labour market at higher ages, but it is not probable that all early pensioners belong to them. (Oecd.org, 2004) In case of removing this early retirement possibility, the employment chances for older must be developed and thus it will help to deal better with exclusion problem. In several OECD countries this problem of earlier retirements was solved by introducing sanctions or increasing the number of years which are needed to contribute to the system to get a full pension. On the

contrary, some of them initiated special bonuses for people retiring after the standard pension age. (Whiteford and Whitehouse, 2006)

Concerning the most suitable retirement age limit, it is hard to define whether it is possible at all. Gradual retirement age growth would increase the tenability of defined benefit as well as defined contribution plans. In DB plans it will lead to better financial situation of the system and to pension rise of the individual. In DC plans, the later retirement age results in higher annuity. In the Czech Republic, each important political party had prepared its pension reform visions and retirement age proposals. The <u>ČSSD party</u> (Czech Social Democratic Party) designed the future retirement limits for both genders on age of 65, but it is planned the men reach this retirement age in 2030 whereas the women start to retire at this age in years 2033-2043 in dependence on the number of children. The KDU-ČSL (Christian and Democratic union-Czechoslovak People's party) keeps the lower limits for women according to number of children as well. For the childless women and men, the limit will be increased on 65 too. KSČM (Communist Party of Bohemia and Moravia) want to retain its current PAYGO DB system and the age limit will be growing since 2030 four months a year until reaching 65. The ODS proposed, (Civil Democratic Party) the limit will go up by the current pace on 65 for men and all women and at the end of the thirties will further rise by two months a year and later by one month a year. At the end of the projection horizon (year 2100), the final retirement age will reach 71. (Mpsv.cz, 2005)

Considering all these plans or proposals, the least suitable appeared the plan from KSČM, because the limit is increasing very slightly by maintaining the relatively high pension benefits. So pension revenues will be probably realized through higher taxes and by transferring some resources from other parts of the state budget, but this would mean a significant decline of disposable earnings of households and restrictions of possibilities to save individually for the pension from their own sources. The second, totally different view of the ODS will be surely more convenient for the system and it is probable that in 2100, the quality of life and of physical and psychological health will be in such great level, that the age of 71 could be optimal, but on the other hand also could not.

## 1.3 Performance and better adaptation of ageing workers

#### 1.3.1 Active ageing

In the 1990s, the concept of active ageing appeared with its main idea of promoting the importance of activity and health in older ages. This program was also supported by World Health Organization (WHO). The concept tried to focus not only on productivity and other similar features connected with labour market but also on health, involvement and participation of older people as full-value citizens. The WHO formulated this approach in the following saying:

"Years have been added to life, now we must add life to years."

(WHO, 2001 cited in Walker, 2006)

For approximate determination of the suitable retirement age is necessary to take into account all the possible features and decisive characteristics of older workers. These statements of their performance should either support their possibilities of longer working or on the other hand confirm that their most important work abilities and qualities deteriorate with higher ages. Is it relatively hard or even impossible to define precisely in what age the worker becomes an ageing worker, because everyone is ageing in his personal way. This opinion, among others, supports Barnett, who suggests that the aging process is hard to study and define exactly, because each generation is very likely different in their older ages than the previous was or the next will be. He also amended; the people who are now at the age of 75 are like people in the past who were 65. (News-service.stanford.edu, 1994) Therefore, in this study, it is supposed the worker becomes an ageing worker in ages of 50 and more.

#### 1.3.2 Stereotypes

Workers in higher ages are in eyes of society usually considered as less productive, harder to train, demanding health care more often, relatively expensive, resistant to change and to new technologies etc. (Duncan 2003). As Neikrug mentioned, media also present older persons as

helpless and weak from economic, medical and social views (Neikrug, 2003) and so support the common negative stereotypes as well. Walker acknowledged, these views were also proved during the research in UK and are negatively affecting mainly processes of recruitment, training and promotion practices for older employees. (Walker, 2006) But many people forget that the trends in ageing rapidly changed and older people in developed countries are much fitter, healthier and more similar to the rest of the adult population than ever before. (Biggs et al., 2006) The life's careers are changing and do not suit to conventional conceptions anymore, so as Muffels highlighted, it will be very important to replace the current model of age differentiation, which is presented by three life stages of education, work and free time, by model of age integration, where these three attributes will not follow but will blend together during the whole life course. (Muffels, 1998) This theory could be connected with distinguishing two types of age. The first one, chronological age is usually established by political authorities for organizing the social policy in other words for determination whether or not each individual is eligible to draw old age pensions etc. But in fact this statutory defined age does not predict real stages of development of each individual. Second one, functional age is based on individual's abilities and capabilities and therefore is more corresponding because everyone is aging in different ways and the capabilities within the same age group differ as well. (Greller and Richtermeyer, 2006)

As Daveri and Maliranta reported, according to medical and psychological studies, it was shown that physical and cognitive abilities decline with age. (Daveri and Maliranta, 2007) These statements are also supported by Naumanen, who beside the physical deteriorations considered mainly psychological limits e.g. unwillingness, rigidity, learning problems and declines in memory processes. (Naumanen, 2006) Although the lower effectiveness of short-term memory is regarded as a basic aspect and problem of ageing workers, Schneider thinks these changes could be slowed or compensated in some cases. E.g. when the people have higher level of a certain or specific knowledge, it is easier for them to store and remember the information, if they are connected with the previous knowledge from the same framework. (Schneider, 2003) Another stereotypes or negative attitudes to older workers concern their lack of creativity, limitations in doing heavy physical work, aversion to taking orders from younger workers etc. (Taylor and Walker, 1994, 1998) Although these stereotypes are relatively strongly rooted in our society; there is a lot of evidence which contradicts it. It was argued that higher age is connected with long job keeping, in other words the older person usually spend a long time in the same job or position within the same work routines and so

they could feel demotivated, bored or frustrated – therefore not the age but boredom or low work motivation could be the reason of the skills or knowledge stagnation. (Yeatts et al., 2000) As Walker pointed out in his study, according to Warr and Birdi, the older workers are on average as effective as workers who are younger. It was also shown, that the number of accidents on the workplace is lower than by younger ones. (Walker, 2006) Others acknowledged, older workers are better at working constantly and unsupervised (Hartmann and Patrickson, 1997) and although the older workers possibly create not so high volume of work as the younger colleagues, they also make significantly less errors than the younger ones. Also better attendance and less 'voluntary' absences were noticed. (Greller and Richtermeyer, 2006)

Not only Walker but also many other researchers found, the hypothesis of general decline connected with age are improper and fallible. They consider ageing not as just decline but they rather understand it in terms of four different features – loss, growth, reorganization and exchange. (Ackerman and Kanfer, 2004) Moreover, significant age related differences were found mostly after 75 years of age (Ruoppila and Suutama 1994 cited in Naumanen 2005)

#### 1.3.3 Intellectual abilities

If we consider intellectual abilities of mature workers, there was an interesting study conducted by Ackerman and Kanfer. They divided the intellectual abilities in two categories:

- <u>Fluid intellectual abilities Af</u> are mostly connected with working memory, abstract reflexion, attention, processing of latest and new information
- <u>Crystallized intellectual abilities Ac</u> connected with general knowledge, scope of vocabulary, verbal comprehension.

The changes and development of these two abilities were investigated and then compared. The results showed that these two variables change with age but are not developing in the same way. The Ac are increasing or improving in middle and even higher ages. On the contrary, the maximum levels of Af are achieved in early twenties. So it seems, the fall in Af happens in context of increase in Ac, thanks to gaining knowledge and skills during the life.

Although it was shown in the study that the Af decline with age, in other words ability of learning is decreasing, Becker and Lauterbach reached a little different conclusions. The higher the level of education, the longer the ability of learning prevails. (Becker and Lauterbach 1997 cited in Schneider, 2003) Considering personal characteristics and behaviour, they also acknowledged some declines in emotional expressions, mainly by limiting negative emotions and better regulation of emotions in general. This could serve as a positive in professional environment, as well as lower extrovert and neurotic behaviour and higher conscientiousness. (Ackerman and Kanfer, 2004) The elderly are likewise described as wiser, understanding of important values, more responsible and reliable than younger ones. Among other strengths, self-confidence, maturity, wisdom, commitment, experiences etc. could be emphasized. (Naumanen, 2006) One of the opposite characteristics which were mentioned was declining openness and willingness to experience or further training. This evidence is supported by Griffiths too although he supposes that the training methods are usually not developed for older people and so do not suit them. (Griffiths, 1997) Moreover, higher age brings along higher general experiences, which are also connected with longer participation in the labour market. (Davery and Maliranta, 2007) Although these experiences could be seen as an advantage, a study conducted by Society for Human Resource Management showed, that 62% of older workers found it hard to find a job in their ages despite their long experiences and capabilities. Another 43% was disappointed or concerned by the possibilities and lack of training. (Hanks and Icenogle, 2001)

#### 1.3.4 Productivity

<u>Productivity</u> could be considered as "the output of goods or services per unit investment of human capital. The output that is achieved reflects the immediate input of human capital, the work effectiveness of individual employees, any loss of time that results from absenteeism, acute or chronic illness and the long-term loss of human capital due to premature retirement."

(Shephard, 1999)

One of the next very important criterions whether it is worth still to employ the worker is his productivity. Opinions on the productivity of older workers differ as well as on other abilities and characteristics, which were mentioned above. Some of them think, more closely to retirement the person is the more the productivity declines. (MacLeod and Tang, 2006)

Muffels also supports this statement and specifies that the certain threshold after which the productivity starts to fall occurs firstly in ages between 45 and 55. (Muffels, 1998) Although there is some evidence which supports the negative relations between age and productivity, the lack of longitudinal studies conducted for this purpose determines the non-reliability of these results. Also many results were just generalized and did not distinguish between diverse work and occupational conditions. (Duncan 2003) Another study investigating the differences in productivity among younger and older employees showed totally different results and opinions too. The team tested more than 1,000 doctors and other 600 adults in different ages and at the end the data confirmed, that a large share of older individuals were doing as well as the younger ones or in some cases even better. (Kleiner and Schwartz, 1999) Other study, conducted in Netherlands, also acknowledged the ambiguity and difficulty of this relation and it was concluded, that the productivity is growing up to the age, which is dependant on extent and quality of investments into the human capital within each company. In other words, firms dedicating more time and effort for older workers development will reach higher productivity. (Muffels, 1998)

Connected with productivity is also the capability of effective using technological equipment especially in terms of communication technologies. It is argued that older people have bigger problems with coping and operating new technologies. In case of internet, Canadian study from 2002 showed, 44% of workers aged 55 and under used the Internet in comparison with 29% aged 55-64 and only 5% who were aged 65 and more. (MacLeod and Tang, 2006) But should be this number understood as a low? Many further studies or researchers agreed on difficulties in technology adoption among older workers or older adults in general (e.g. Daveri and Maliranta, 2007, Marquiea et al., 2002). "Consumers and the communications market survey" in 2006 confirmed the engagement with technology starts to fall after 55 but it was also highlighted, that attitude, character and social reasons of each individual are the key determinants as well. (Ofcomconsumerpanel.org, 2006) Another study conducted between members of AARP ("membership organization leading positive social change and delivering value to people in age 50 and over") from 1997 to 2001 in America discovered the older users became the fastest growing group on the Internet and they noticed a 300% increase in the reported online access among its members in these four years. (Aarp.org, 2003)

It is not so far; these computer technologies became a part of our lives, especially in the Czech Republic. Although the Czech Republic was connected to the Internet 16 years ago officially, using of the Internet as we know it now happened much later, about year 2000. (Technet.idnes.cz, 2007) Another explanation, why the older people are not so receptive to it, is because they do not benefit from it as much as the younger generations do and so, if they do not benefit from it, they are less likely to use it. (Chappell and Zimmer, 1999) As long as the web does not adapt to needs and requirements of older people, their interest and effort to engage in it will be increasing only slowly.

## 1.3.5 Employment policy towards maximizing the use of older human capital

Considering protection of the rights of older workers, many European countries already implemented several legislations. E.g. in Netherlands, the redundancy plans that discriminate on the basis of age were banned. Also in Germany and France, companies which make older workers redundant are penalized etc. (McDonald and Potton, 1997) In the Czech Republic, last year so called Anti-discriminatory law was introduced, but although the equality of job opportunities should be therefore treated in this way, its observance in a real life is usually very low. (Diskriminace.cz, 2007)

In these days and mainly in the future, when the labour force becomes older, the companies will need to maximize use of human capital more than ever before. Therefore, changes in policies allowing gradual retirement or part-time work will be probably more preferable, although they are nowadays rather rare. If the society and especially the employer wants the worker to stay actively in the organisation, the job must satisfy his/her needs and values and must be attractive for them as well. (Yeatts et al., 2000) Therefore, it is neccessary try the companies to adapt to these population changes rather than let them in their convictions that the increasing proportion of older employees will still fit into these previous established strucutres. The organizations and companies as well as the whole society need to be tended towards age neutrality, where the age will not be considered as the main determining factor but rather to be treated as one of many personal characteristics. (Duncan, 2003)

Muffels defined several characteristics or improvements which are based on flexibility presumption and which could help adapt the company better to older workers and vice versa:

- Time flexibility contains possibilities of part-time working, overtime working,
   contracts defining number of hours per annum or even per whole career,
- Flexible employment occasional employment, timing employment, employment for a limited period of time,
- Flexible work contents changing and more varied work tasks,
- Flexible payments task-wage, wages determined from assessing the performance of the individual,
- Flexible work environment working from home, mobile job-independent on place,
   job practiced through telecommunication systems,

Ageing of workforce and population in general requires essential changes in companies HR policies. He also adds, the employers should focus more on human capital investments especially invest to ageing workers and so boost the productivity. (Muffels, 1998) It will be more convenient for firms to invest into whole-life development of its employees. But also the state should motivate and lead the enterprises towards the changes of these policies by e.g. tax system stimulations, move the retirement age and create possibilities for partial retirement, as it works in Sweden or in USA. (Muffels, 1998) Moreover, the employers should promote the importance of health and therefore prevent and minimize the health danger at the workplace. (Naumanen, 2006) But also attempts to create friendlier and more comfortable work environment in the way that employees of all ages could benefit from it, can develop their working potential at maximum. (Walker, 2006)

Next, fundamental step is to support the psychical activity and motivation of the worker. As Coleman and Moyers pointed out, employers, supervisors and other employees should cooperate with older ones to understand them and so prevent the barriers which occur between them. (Coleman and Moyers, 2004) Also these workers should continue in their jobs with some physical demands and so sustain and moderate their physical abilities and activities. On the contrary, if the worker would be removed from his previous position because of its assumed physical or psychical demandingness although he/she did not required the replacement, it could cause to feel them redundant and so demotivated as well.

"Older employees thus may be placed in jobs that maximize their strengths rather than require abilities that they no longer posses."

(Coleman and Moyers, 2004)

Other possibilities how to try remove possible barriers to further employment of elderly could be considered as follows:

 Try to move all age barriers and stereotypes through five dimensions of age management (better career planning):

#### a) Job recruitment

During the entrance interview, the HR managers should replace the tests focusing on processing speed of information and short-term memory processes by tests which will measure the relevant knowledge, skills and competences. (Hartmann and Patrickson, 1997)

#### b) Continuous training

When there is a lack of training, it could cause underperformance of older workers and the worker can be also discouraged because of less up-to-date knowledge possessing than younger workers have. If considering training, using of different methods may be implemented in different ages in the work career and the trainings should be also designed in a way to give more time for practicing the new gained knowledge. Receiving competent support from trainers during the process leads to encouragement too. (Coleman and Moyers, 2004) The companies which will help and support their older employees in participation in such trainings will profit through their increased skills levels and higher loyalty. For instance, evidence from Tesco supermarkets showed that older employees who were participating in training programs usually stayed in the company longer than their younger colleagues. (Hartmann and Patrickson, 1997)

- c) Development and promotion
- d) Flexible working practices (see Muffels characteristics above)
- e) Changing attitudes towards ageing workers from personal view

Focus on both quality as well as quantity

(Casey, Metcalf and Lakey, 1993 cited in Walker, 2006)

- Create more age-mixed teams
- Maintaining and promoting good health and capacity of workers
- Age diversity (avoids retirement waves)
- Age awareness, removing age discrimination
- Intergenerational collaboration (tandem training)

The likely results of these HR implementations will be better satisfaction and security for workers and greater productivity for organization. (Walker, 2006)

#### 1.4 Conclusion

The aim of the Literature Review was to bring in a deeper insight into broad issue of population ageing and concepts of pension systems and make the reader more familiar with these topics. Afterwards different findings and opinions of other researches and authors about characteristics and abilities of older workers were provided and from their comparisons and ideas the possible solutions for better employment policy towards older workers were drafted. In the following chapter, research objectives and hypothesis will be introduced as well as description of research methods used in the primary research.

#### 2 METHODOLOGY

The chapters and information mentioned above were discussing and comparing opinions and other studies realized in past years and this information should serve as a background for better understanding of this topic and for further supporting or rejecting the information gathered from the research. Now, in this chapter, research questions and hypotheses will be introduced and on their basis, research strategy and appropriate research methods will be defined. Then, further information about population, designing the questionnaire, interview and pilot study will be mentioned and also several advantages or disadvantages of these methods will be highlighted. Finally the data collection process, limitations of the research and ethical issues conclude the whole chapter.

In this study, a particular phenomenon is investigated, which already exists and will probably exist in the future too. One of the objectives was to find out if the ordinary people are aware of the problem of population ageing at all and what are their opinions about it. Also their standpoints to the current pension systems were investigated as well as their attitudes to productivity and experiences with age discrimination. To identify the objectives which are set quite widely, the author was expecting to gain both, quantitative as well as qualitative data and so transform the attitudes and opinions to the answers which will provide us image about what the people think about and how do they feel in a position of ageing population.

- Examine and evaluate how big is the awareness of population ageing and how do the ordinary people think about it.
- Investigate the opinions of the people about current pension system in the Czech Republic and which improvements would they propose.
- Evaluate the attitudes to earlier retirement of woman. Are there any jobs in which the people should retire earlier than in any others?
- Which retirement age limits do the people propose?
- Assess the opinions of the respondents on their work performance (concerning productivity, familiarity with computers and attitude to trainings).

The hypotheses were proposed as follows:

- Significantly more women than men are persuaded, they should retire earlier because of mother duties and because of higher life demands.
- The people with higher level of education propose higher ages for retirement.

### 2.1 Research approach and strategy

It is important to choose the right method in order to succeed in the research. In broader context, the research approach used in this study can be considered as deductive, it means the existing problem is investigated and defined and then the process follows by stating certain hypotheses which are then tested and at the end confirmed or rejected. (Burney, 2008) Therefore the author decided, the most suitable research strategy which is also associated with deductive approach is a survey. This strategy enables to collect relatively high amount of data which are comparable, easy to understand and are usually connected to the present situation. (Denscombe, 2003)

## 2.2 Research methodology

For purpose of the study two research methods were used – self-administered questionnaires and semi-structured interview. The reasons why both were chosen was mainly its increased validity and credibility and also to provide information supported by opinions from both parties concerned (employees vs. employers).

#### 2.2.1 Questionnaires

As any other research methods also the questionnaires have several advantages as well as disadvantages. Between main pluses belong relatively low costs in terms of time and price. Especially in these days, using internet and e-mail, the questionnaire can be sent in distant places with nearly no costs. This does not apply to postal surveys, where the costs needed for distributing the questionnaires are much higher and even the response rates by postal surveys are lower than by using other ways. (Robson, pp.84, 2000)

#### 2.2.1.1 Designing the questionnaire and the pilot study

The questionnaire was divided in three main parts. The first one, introduced the purpose of the questionnaire to respondents, assured them about its anonymity and confidentiality and provided them the information about delivering it back. The second section was focused on respondents attributes such as gender, age and level of education and last part consists of twenty questions and one supplementary question. Most of the designed questions were both closed and opened as well, in order to let the questioned express their feelings, opinions and attitudes to the particular situation. In case of some closed questions, some of them were designed as list questions and category questions. There was also one ranking question, where the respondents' preferences should be set. In some of them, only one option should be chosen but there were also few questions, where the respondent could tick more. These all types of questions were mixed together in order to keep the participants interested as much possible.

As soon as the questionnaire was made and consulted with the personal tutor, it was tested on few students and friends to find out if the questions are understandable and not confusing. After few corrections based on their remarks and recommendations, the questionnaire was little bit adjusted and then prepared for distribution.

#### 2.2.1.2 Distribution and collecting of the data

The way of distributing the self-administered questionnaires was an e-mail and the personal delivery. The first delivery method via an e-mail had appeared more advantageous, because it is not so much time and money consuming. Unfortunately, the whole research could not be conducted in that way because many of the questioned people do not have a computer or were not familiar with informational technologies and so they were not able to fill it in the electronic form. That is why the other questionnaires had to be printed and delivered personally, what also contributed to higher time demandingness of the project. In total, the questionnaires were delivered approximately to 57 respondents and at the end of the collecting process, 51 questionnaires were collected. Although 51 is not very high number it was not easy to find so many people in this age category, therefore all "older" family

members had engaged their colleagues and other friends in my distribution network. This also explains why the response rate was so high.

#### 2.2.1.3 Population

The questionnaires were focused on Czech population aged 50-65 years. The reason, why only this category was chosen is that many of the questions directly refer only to older people and are investigating their experiences and opinions which they gathered during their life. The lower limit was set up, because age of 50 is very often considered as beginning of real ageing and the upper limit was selected according to the governmental proposals of increasing the retirement age to 65 years.

#### 2.2.2 Interviews

The interview is a very useful research method especially in case where the information we need cannot be observed directly. (Greenfield, pp.169, 1996) In terms of this study, the possibility of conducting the semi-structured interview, enabled to bring more insights to the issue which is discussed. Because of its interactive character and flexibility, the interview is a big experience as well. Another advantage of this method is possibility of gaining very detailed information which can be brought to all parts the interviewer wants to ask for. When the question is misunderstood, the interviewer can make the situation clear. Also any special equipment is needed. Feelings and body language predicates about the interviewee much and can be useful in total assessment of the person and things he had said. As Kane suggested:

"The closer the interviewer is to the respondent in class, sex, age and interests, the greater chance the interviewer will be successful."

(Kane cited in Grienfield, 1996)

On the other hand, the interview is very time consuming and not all of the gathered data are relevant to the subject. Therefore, the data processing is exhausting too.

## 2.3 Ethical issues and limitations of the study

During creating and conducting the research three main ethical principles were considered:

- Consent
- Privacy
- Confidentiality

In other words, all respondents and participants were taking part in the research voluntarily and anonymously in order to respect their privacy. They were also informed about the purpose of the study and how the information they provided will be treated. (Robson, pp.29-32, 2000)

Before the results of this study can be considered, there are number of limitations which we should bear in mind. The researched sample group was relatively small, due to reasons mentioned above. More time would be needed to address more respondents and so increase the validity and reliability of the research. Other problem, which occurred, was that some open-ended answers were not filled in. The possible reason could be the non willingness of the participants to think deeper about the problem or they just might have been in a rush and they filled in only the short and closed questions. In terms of interview with the company representative, the gained information should present the attitude or general opinion of the employer or company as a whole, but many of the questions were answered subjective. Realizing more interviews on the same basis could help to make the results more objective as well. Last but not the least limitation are the financial costs.

In this area of pension systems, ageing workforce and other connected issues, more studies will be needed to carry out in the future in order to understand how is this process developing and how the things could be improved for better use of this particular human capital.

## 3 RESEARCH RESULTS AND ANALYSIS

The following chapter will be focused on the analysis of particular data gathered from questionnaires and interview. Its analysing will help us to answer and evaluate the objectives and the hypothesis we stated. In order to process the data from questionnaires and to evaluate the two hypotheses, the statistical programme Statgraphics was used, mainly because the author is more familiar with this programme thanks to its past exercise. Other information gained from the questionnaires will be processed qualitatively according to its content and then compared to the relevant information from the interview.

- Examine and evaluate how big is the awareness of population ageing and how do the ordinary people think about it.
- Investigate the opinions of the people about current pension system in the Czech Republic and which improvements would they propose.
- Evaluate the attitudes to earlier retirement of woman. Are there are there any jobs in which the people should retire earlier than in any others?
- Which retirement age limits do the people propose?
- Assess the opinions on their work performance (concerning productivity, familiarity with computers and attitude to trainings).

The hypotheses were proposed as follows:

- Significantly more women than men are persuaded, they should retire earlier because of mother duties and because of higher life demands.
- The people with higher level of education propose higher ages for retirement.

The first part will describe the profile of the respondents-concretely gender, age and education level. The second section will focus on consideration of the opinions about the issue of population ageing and respondents attitudes to the Czech pension system. The hypothesis will be verified as well. The last part, will investigate features of older employees and their relationships towards working process. At the end, short paragraph will be devoted to the findings derived from the interview.

## 3.1 Profile of respondents

Table 2 Summary statistics for age

Count	51
Average	55,8039
Standard deviation	4,54761
Minimum	50,0
Maximum	65,0
Range	15,0

This table shows summary statistics for age. As you can see, the average age from the number of 51 respondents aged 50-65 (these numbers presents minimum and maximum) is 55, 8039 and the standard deviation, which explains how much differ the particular cases in the research group is 4,54761.

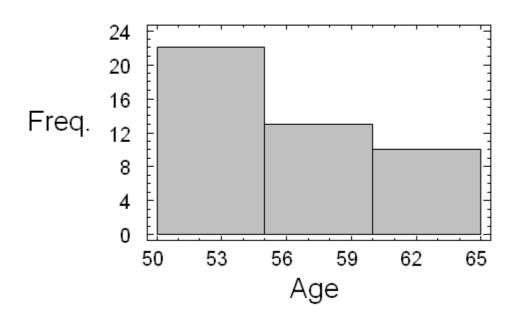
Table 3 Frequency tabulation for age

Class	Lower	Upper	Engarana		Cumulative	Cum. Rel.
Class	Limit	Limit	Frequency	Frequency	Frequency	Frequency
1	50,0	55,0	28	0,5490	28	0,6666
2	55,0	60,0	13	0,2549	41	0,8039
3	60,0	65,0	10	0,1961	51	1,0000

This table performs a frequency comparison by dividing the range of age into equal width intervals and counting the number of data values in each interval. The frequencies show the number of data values in each interval, while the relative frequencies show the proportions in each interval.

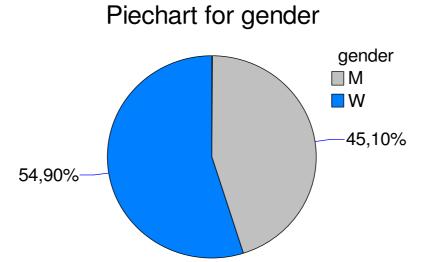
Chart 1 Age of respondents

# Age of respondents



Y axis presents frequency of respondents in each age interval

Chart 2 Piechart for gender



The number of participating women was 28 and they outweighed the men participants as you can see in the pie chart.

**Table 4 Frequency for level of education** 

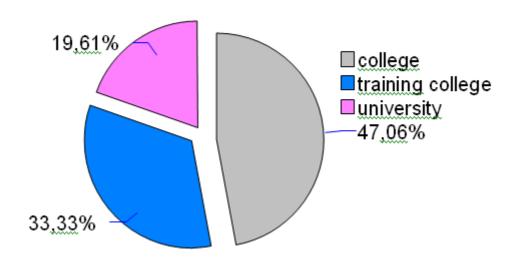
Class	Value	Frequency	Relative Frequency
1	college	24	0,4706
2	training college	17	0,3333
3	university	10	0,1961

This table shows the number of times each value of level of education occurred, as well as percentages statistics. For example, 24 respondents indicated as their level of education college. This represents 47, 06% of the 51 values in the file.

According to level of education, the respondents had the possibility to choose from 5 levels sorted upwardly: Basic school, training college with vocational certificate, training college with leaving certificate, college with leaving-certificate, university. No basic school or training college with leaving certificate was ticked.

Chart 3 Level of education

Level of education



## 3.2 Attitudes to population ageing and Czech pension system

First two questions asked about the current issue of population ageing and its awareness among the participants. 11 from all 51 respondents did not notice the current discussions about population ageing at all, while the rest which did should mention its attitude and give reasons whether it is a real social problem or just an exaggerating of ever existed process.

From the 40 people who noticed, 35 supported the idea that this situation could result in a problem. 31, 43% of them pointed out, the biggest problem which will occur in connection with population ageing will be the significant decrease of people in productive age and another 20, 00% mentioned birth-rate fall as well. 37, 14% did agree with the seriousness of the issue, but did not argued why they think so. Another respondent draw the attention to the lack of capacity in senior and retirement houses and in health care institutions as well. On the other hand, only 5 people of the 40 informed people consider population ageing as a natural development of population. Two of them also appointed, the pollution of the environment and gradual chemicalisation of the society will contribute to decreasing of the life expectancy and therefore the problem of population ageing will be solved.

It seems the Czech society (generalized sample group) is mostly aware of the population ageing problem and to investigate whether the current Czech pension system is sustainable in the context of population ageing, the next 6 questions are concerning mostly pension system and respondents opinions to it.

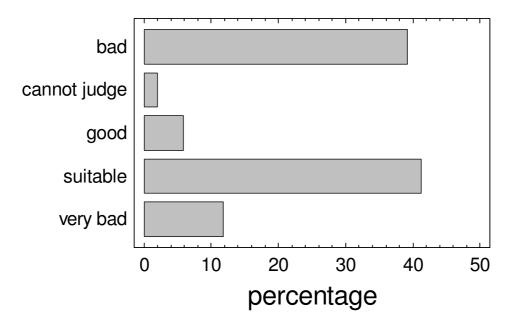
Table 5 Frequency table for opinions on Czech pension system

Class	Value	Frequency	Relative Frequency
1	Very good	0	0
2	Good	3	0,0588
3	suitable	21	0,4118
4	bad	20	0,3922
5	very bad	6	0,1176
6	cannot judge	1	0,0196

This table shows the number of times each option of opinion on Czech pension system occurred, as well as percentages. For example, in 20 cases the opinion on Czech pension system equalled bad. This represents 39, 22% of the 51 values in the file.

Chart 4 Opinions on Czech pension system





Respondents were then asked to say what kind of pension improvements would they propose, if any and they could tick all suitable from four options. (Only 15 ticked two options at the same time).

- A- Current system does not need any improvements
- B- Postponing of retirement age
- C- Introduce compulsory private pension savings fund or insurance, or additional pension insurance
- D- Propose other improvements

The first option chose only 7,843% of respondents, whereas two of them answered the previous question "good" and two of them "suitable". Second option was ticked by 13 people (which counts 25, 49%) and third one was considered as the most suitable for 31 people (68, 627%). 14 respondents (27, 451%) also appointed other possibilities such as increase the pension insurance rate which are creating the state pension fund. Other respondent also

mentioned the possibility of investing some part of the pension savings and so increase (but on the other hand also decrease if the investment fails) the value of the savings. Other ideas concerned the family member participation. In this case, the respondent suggested involving children to support the parents in their late age, but as he also mentioned it is more about education in each family. Last proposal which could be seen as useful is the possibility of gradual increasing the retirement age limit with decreasing working hours. (E.g. after certain threshold, the working hours per week will be decreased - the older worker the less hours spend at work).

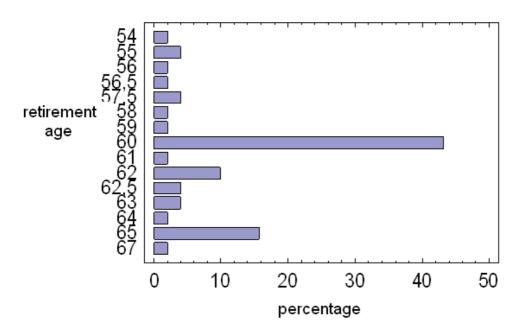
One of the key and very important questions the people were asked was the proposing most suitable retirement age in light of an individual as well as of the sustainability of public finances. Because some of these information were obtained in intervals or in different numbers for women and for men, they were transformed into arithmetic mean for better data processing.

Table 6 Frequency table for proposed retirement age

Class	Value	Frequency	Relative	Cum. Rel.
Ciass	Ciuss Vuine Prequent		Frequency	Frequency
1	54	1	0,0196	0,0196
2	55	2	0,0392	0,0588
3	56	1	0,0196	0,0784
4	56,5	1	0,0196	0,0980
5	57,5	2	0,0392	0,1373
6	58	1	0,0196	0,1569
7	59	1	0,0196	0,1765
8	60	22	0,4314	0,6078
9	61	1	0,0196	0,6275
10	62	5	0,0980	0,7255
11	62,5	2	0,0392	0,7647
12	63	2	0,0392	0,8039
13	64	1	0,0196	0,8235
14	65	8	0,1569	0,9804
15	67	1	0,0196	1,0000

This table shows the number of times each value of proposed retirement age occurred, as well as percentages (relative frequency x 100) and cumulative statistics. For example, in 22 the retirement age was proposed 60 years. This represents 43, 14% of the 51 values in the file. The rightmost column give cumulative counts and percentages from the top of the table down.

# Barchart for Proposed retirement age



In order to state if the level of education is the decisive element for determination the retirement age, the hypothesis was set and will be verified by the Analysis of variance (ANOVA). First null hypothesis and alternative hypothesis will be stated. Then, on a significance level of 5 %, we will investigate whether the null hypothesis will be rejected or not using the Statgraphics programme.

### The people with higher level of education propose higher ages for retirement.

H<sub>0</sub> : The retirement age proposal does not depend on level of education. (Variables are independent on each other)

 $H_1$ : non  $H_0$  = the retirement age proposal is dependent on level of education.

Table 7 Summary statistics of retirement age proposals

	Count	Average	Standard deviation	Coeff. of variation	Minimum	Maximum	Range
College	24	61,0625	3,34701	5,48128%	54,0	67,0	13,0
Training college	17	60,2059	2,2985	3,81773%	55,0	65,0	10,0
Uni	10	61,25	2,63787	4,30672%	55,0	65,0	10,0
Total	51	60,8137	2,87917	4,7344%	54,0	67,0	13,0

This table shows the average retirement age which was proposed by people with different level of education. The total average is 60, 814 years.

Table 8 ANOVA statistics

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Between groups	9,66973	2	4,83487	0,57	0,5675
Within groups	404,811	48	8,43356		
Total (Corr.)	414,48	50			

The ANOVA table decomposes the variance of the data into two components: a between-group component and a within-group component. The Df between groups presents degree of freedom which is counted as number of variables minus  $1 \rightarrow [(\text{types of education})-1] = (3-1=2)$ . Df within groups is made as difference between total number of observation – number of variables (51-3=48). The F-ratio, which in this case equals 0,573289, is a ratio of the between - group estimate to the within-group estimate. Since the P-value of the F-test is greater than or equal to 0,05 (=5% confidence level), there is not a statistically significant difference between the means of the 3 variables at the confidence level.

From this statistical test results, the P-Value is 56, 75 % it means, on the determined confidence level, the null hypothesis will be not rejected and thereore the level of education and retirement age proposal are not dependant on each other.

Question 7 asked question about differences in retirement age according to gender. In this study, the author tried to demonstrate whether or not is the gender significant in deciding whether to retire earlier than the opposite gender. In the Czech Republic pension system, the right that woman retire earlier is strongly rooted. The main point was to find out if only women consider themselves more life work loaded and so they deserve earlier retirement than men or if these standpoints to earlier retirement of woman share men as well. Therefore the null hypothesis was stated and verified by the Contingency table in the same statistical programme as before.

Significantly more women than men are persuaded, they should retire earlier because of mother duties and because of higher life demands.

H<sub>0</sub>: The gender is not decisive for determination whether the women should retire earlier. (The opinion whether the women should retire earlier than men is not dependant on gender.)

 $H_1$ : non  $H_0$  = The opinion whether the women should retire earlier than men is dependant on gender.

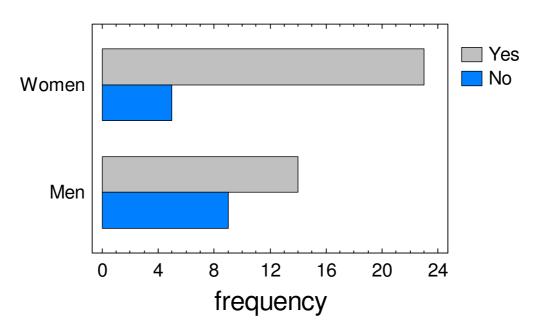
Table 9 Chi-Squared test of independence

Test	Statistic	Df	P-Value	Correlation
Chi-Squared	2,869	1	0,0903	0,2372

This table shows the results of a hypothesis whether or not to reject the idea that the gender and opinion to earlier retirement of women are independent. Since the P-value is greater than or equal to 0.05, we cannot reject the null hypothesis. As you can see from the chart below, 23 women think they should retire earlier and 5 think there is no reason they should. On the other hand 14 men are for earlier retirement of women and 9 are not. Also the correlation coeficient which is 0, 237 is approximating 0, in other words the variables are rather independent. Therefore it was shown, there is no strong proof that significantly more women are persuaded they should retire earlier than men (in other words these two variables are independent).

Chart 6 Opinions on earlier retirement of women





The only reason why the respondents "voted" for earlier women retirement was mainly because of their mother and household duties which are very demanding, therefore the number of children should be also considered as a reason for earlier retirement. On the other hand, both women and men who disagreed with the early retiral of women argued that life expectancy of women is much higher than of men and also if there still prevail the earlier retirement based on number of brought up children, the men who were on "maternity leave" should have the possibility to earlier retiral as well.

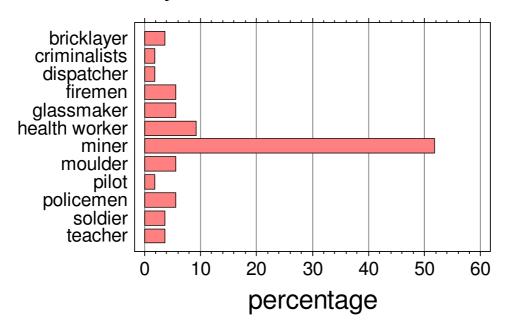
The last question whether people working under hard physical or psychical conditions should have a right to claim an earlier retirement was answered mostly positively. 76, 47 % of participants think that some occupations might be eligible and more than 50 % mentioned miner as a most exhausting job deserving it. Between other positions, all types of health workers including doctors, nurses were mentioned especially because of both physical and psychical demands on their work and the work shifts as well. Equal weight was given to firemen, policemen, moulder and glassmaker.

But the remaining respondents who answered NO to this question highlighted, that no occupation should have any special rights for claiming earlier retirement, because everyone is

choosing his/her job from their own free will and they accept all the conditions flowing from the job by signing a contract.

Chart 7 Occupations deserving earlier retirement

# Which job could claim earlier retirement



## 3.3 Workplace relationships

#### 3.3.1 Productivity

As mentioned in Literature review chapter, the opinions on productivity of older people are diversified. Therefore, firstly the workers aged 50+ were asked what do they think about "their" productivity and these results were then compared to opinion of a personnel director from on of the biggest employers in the Liberec region. The results were follows:

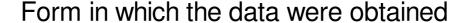
The majority of respondents (74, 51%) did not consider themselves as less productive than the younger co-workers. 2 respondents did not take any view and 19, 61% conceded their productivity is lower. One respondent also suggested this answer could not be answered generally, but should be considered individually. Each person has different presumptions and performances in different ages and therefore age is not decisive generally for decrease of productivity.

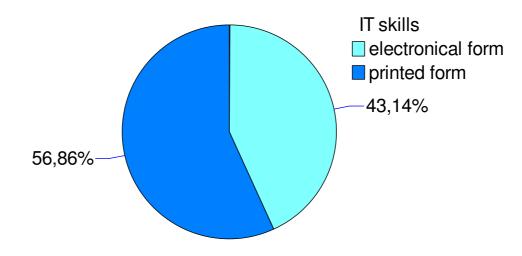
To compare the employees' views of their productivity to the opinion of the employer, he stated the company has no evidence which would support or on the other hand reject the idea about productivity of older workers. He expressed himself, that this issue should be considered individually with similar rationale as mentioned the respondent above.

#### 3.3.2 IT skills

Next topic argued older workers (50+) experiences and skills in informational technologies area. 41 of respondents are quite familiar with using a computer whereas 25 of them use it every day, 7 only at work and 9 of them just occasionally. 10 people do not use computer at all. We can also take into account to this question, how many questionnaires were obtained electronically and how many in printed form.

Chart 8 Form of the received data





#### 3.3.3 Willingness and attitudes towards training

In order to find out whether the older workers are willing to educate themselves in company trainings and what motivates them, it was investigated that 44 respondents are willing to participate in the training, only 3 have no interest and four remaining answers were missing.

On the question, whether they have ever taken part in such course or training and what positive did it bring to them, 25,49 % informants answered they had never been on training. The remaining 74, 51 % people, who have some experiences with trainings mentioned that the main contribution lies in gaining new information and experiences and extending their knowledge. Others appreciated the possibility of increasing their qualification and therefore the higher perspectivity on the labour market, better insight into their work and meeting new people with similar intentions. On the other side, there were 5 respondents who found trainings useless and connected only with other duties.

Table 10 Reasons for participation in training

Class	Value	Frequency	Relative Frequency
1	employers requirement	13	0,2549
2	extend of knowledge	27	0,5294
3	more perspective on the labour market	10	0,1961
4	no reason-trainings are useless	1	0,0196

As you can see in the table, the majority of participants are taking part in trainings mostly from their own will in order to broaden their abilities, skills and knowledge. For 25, 49 % of all, the main reason why they attend courses and trainings lies in the employer's requirement. 19, 61 % participate because of increasing their potential and so they become more perspective on labour market. (For additional findigs of the research see Appendix D)

## 3.4 Findings from the interview

The interview was conducted with the aim of comparing the answers from the company representative, in other words from the view of employer, with answers from people who are employed and investigate whether their attitudes and opinions differ. The interviewee was Director of Human Resources department in Lucas Varity s.r.o., which belongs to the division of TRW Automotive. Although the interview was focused on issue of workforce ageing and attitudes of the company towards ageing workers and although it was expected, thanks his long life experiences in the human resources department, this interview will bring many useful empirical evidence, majority of the contributions gained from the interview were irrelevant. It was also obvious; the interviewee did not have any evidence of facts, so the answers should be considered only like his own opinions. To read the paraphrased interview, see Appendix C.

### 4 DISCUSSION

All relevant findings from the primary research have been already analyzed in the previous chapter. Now the results will be further discussed and compared with findings of other researchers and studies which were carried out before. Also, it is necessary to highlight, that not many related researches or public opinion polls were conducted in this time, therefore the discussed findings should be considered with respect to it.

## 4.1 Awareness about population ageing

According to survey conducted by Vidovicova and Rabušic, 45 % of the Czech society sees the ageing of population with certain apprehensions. In this research (for further understanding this research means the dissertation research and no other) the generalized sample of Czech society is mostly aware of the population ageing problem and 37, 14 % did agree with the seriousness of the issue as well, mainly from its economic view and insufficiency of financial resources for future retirees. Only 5 respondents who were aware of this issue consider this process as a natural development of population which is not predictable and therefore there is no point why to feel threatened. British economist P. Mullan takes very similar view he also introduced in his book called The Imaginary Time Bomb. He does not see the phenomenon of ageing population as a possible "economical and social end of the world" which will definitely drain all financial resources, but it rather becames a scapegoat of political and ideological roles of social state. He also contradicts the view that ageing of population structure equals to slowing an economic growth and explains that even a moderate growth achieves to compensate every possible requirements of ageing population (the growing consumption of the ageing population will be compensated by the decreased consumption of the less numbered young generation). But it is necessary to highlight, there is no consensus in this question between current economists. (Mullan cited in Vidovicova, 2003)

## 4.2 Opinions on current pension system

During debates about Czech system of social security, politicians very often argue that when creating new strategies, the opinions and attitudes of the public should be taken into account and the legitimacy of the system must be derived from their support. But the majority of the public rather tends to require relatively high interest on security of social conditions. (Rabušic, 2002) As this research investigated, 41, 18 % of respondents think, current pension system is suitable and 39, 41 % consider the system as bad. These numbers are surprisingly highly balanced. But how is it possible that almost the same number of people has totally opposite views on the same question? This could be explained differently. The people, who indicated the system as bad, belong between people who do not consider the system as rightful. Some of them (27, 5 %) also think the insurance rate on social security which is drawn of is too high and in the eyes of 45, 9 % Czech population, the current pension system is too solidary. (Mpsv.cz, 2006) As the ministry added, this opinion prevail mainly by people with higher level of education and favourers of rightwards parties – especially ODS. (Civil Democratic Party). So in order to ask the respondents of this study what are the most suitable improvements of the system they propose, 68, 627 % of them would introduce the compulsory private pension fund or insurance as addition to state pension insurance. These findings are similar to the public opinion conducted by the Ministry of labour and social affairs (further Ministry) as well, but with a little different presumption. The basis of their version is the possibility of partial acquittance from the state pension system. In other words, every person could decide, whether to transfer part of his pension insurance rate on his personal account of private pension fund or not. This possibility was chosen by 58, 2 % of Czech public in 2005.

## 4.3 Retirement age

Other likely and more frequent reform which came out from this research was the increase of retirement age (25, 49%). In Czech, in recent times the political voices calling for increasing the age limit on 65 occur now, but this time equally for both genders. As Vidovicova argues the public is usually not very inclined to these plans of increasing the retirement age limits and this result is consistent with the Czech desire to retire as early as possible, but from the standpoint of solving the expected crisis of pension system, it is not very good news.

Especially when designing the increase of the retirement age seems to be one of the primary steps. (Vidovicova a Rabušic, 2003) This confirms the Ministry as well, which adds 79, 5 % of the Czech inhabitants do not agree with increasing the retirement age. They also found out that relatively higher share of respondents, who agree with this reform belong to people with university education but the dependency between the proposed age and the level of education was not proved in my research. Although some deviations according to the level of education occurred, they did not differentiate significantly and so it proves certain homogeneity of the sample in their attitudes. The most suitable retirement age proposed by the participant of dissertation research was 60, 8 years on average. (Mpsv.cz, 2006) The age of 60 according to the Ministry research is considered for 31, 1 % of population as a highest tolerable age for retirement but on the other hand, the highest tolerable retirement age proposed by respondents aged 24 and less was 65 years. Therefore it is needed to take into account that the Ministry research was carried out between Czech respondents across the all adult age cohorts. In order to reach similar research conditions, the higher number and differentiated age extent will be needed for better comparison of the results.

## 4.4 Earlier retirement of women and "special" occupations employees

Earlier retirement of women could be understood as kind of satisfaction for gravidity, childbirth and following maternity care, which often leaves physical or psychical consequences on the woman. (Vidovicova and Rabusic, 2003) This is also the reason, why the participants (72, 55 %) of this study agreed with earlier retirement of women in dependence on number of children. The ministry also confirmed, in this question prevails common consensus across all age segments and only 6, 9 % of Czech populations think, the women should retire later, because of their higher life expectancy.

Concerning earlier retirement for occupations in which the workers are exposed to hard physical or psychical conditions, the majority of participants in this study (76, 47 %) agreed that some jobs might be eligible for claiming it. More than 50 % mentioned miner as a most exhausting job which deserves it. The explanation of these results could be seen in the past. The pension categories existed in the Czech Republic until 1993 and were divided into three levels. To the third category belonged the majority of occupations, to the second one people working in more exacting positions and first category associated workers from high risk

workplaces, e.g. miners. The workers from first two categories used to retire earlier but it does not exist any more and although the miner unions protest against the cancellation of this advantage the recent Minister of labour does not plan to introduce this law again. (Pamservis.cz, 2008)

## 4.5 Working performance

In the Literature Review, both positive (Duncan 2003, Kleiner and Schwartz, 1999 and others) and negative (MacLeod and Tang, 2006, Muffels, 1998 and others) views and facts about productivity of ageing workers were mentioned and it is more than evident, that the lack of longitudinal studies in this area cannot prove that one view is more reliable than the other one. From research results of this study, 74, 51 % of respondents do not consider themselves as less productive and also the representative of the company who was interviewed admitted, there is no evidence in the company which will confirm that the productivity of older workers is lower or higher. As he and also Duncan acknowledged, the performance of each individual must be taken into account separately and therefore they should not be generalized as a whole group.

Although some studies and researchers agreed on difficulties in technology adoption and using the computers among older workers, (e.g. Daveri and Maliranta, 2007, Marquiea et al., 2002), their results were rejected by the findings of this research. From the 51 respondents, 80, 39 % indicated they are familiar with using a computer, (25 of them use it every day, 7 at work only and 9 respondents just occasionally), which is really high number and as the technology revolution is very quick we can expect the number of ageing workers or older people in general who will use it will have a rising trend. Other declining characteristics (supported by Griffiths, 1997) which were mentioned was declining willingness to experience or further training, but the findings of this study proved different results rejecting the previous statement again. It was investigated, 86, 27 % of questioned people are willing to participate and more than 70 % of them will do it from their own will and not because it is just required by the employer. These facts are highly positive and show that even the older people want to educate themselves and increase their potential value.

### 5 CONCLUSION

The aim of the literature review and this study was to prove the seriousness of the ageing of workforce and the whole population and its possible impacts, especially on the pension system and employment policy. Now, the objectives and hypotheses will be concluded.

- Examine and evaluate how big is the awareness of population ageing and how do the ordinary people think about it.
- Investigate the opinions of the people about current pension system in the Czech Republic and which improvements would they propose.

These first two objectives tried to assess the general awareness and attitudes towards ageing and pension system which is strongly connected with ageing issue. The investigation shown, the majority of the participants were aware and relatively informed about current ageing situation. Also higher share of them were rather sceptic to it and considered this process more from negative point of view – especially as future threat for economical stability of the country. Therefore, after the majority admitted the possible future economical problems derived from the outweighing the non productive generation above the productive, it was relatively surprising that almost half of all respondents feel that the current pension system is good or suitable. As the Czech people demand high social support and security from the state (Vidovicova and Rabušic, 2003); no one of the respondents proposed decrease of the pension or increased pension insurance rates they pay to the state pension fund. Instead, they found more suitable to introduce compulsory pension fund or increasing the retirement age as second frequent option.

• Evaluate the attitudes to earlier retirement of woman. Are there any jobs in which the people should retire earlier than in any others?

#### The hypothesis:

Significantly more women than men are persuaded, they should retire earlier because
of mother duties and because of higher life demands.

As mentioned in the discussion, the Czech society in general and also the majority of the respondents in this research agreed on earlier retirement of women. Three quarters of them support it and although slightly more women outweighed the men in this opinion, the correlation was insignificant, therefore the hypothesis was rejected.

Concerning the right to claim earlier retirement for some occupations which are physical or psychical demanding, more than 76 % of asked people think there are some jobs which are eligible. As the most competent occupations for earlier retirement were considered miners, workers in health sector (doctors, nurses, sanitarists etc.), glass makers, moulders policemen and firemen. The fact that almost everyone is doing his/hers job optionally and from their own will and therefore there is no reason to retire earlier than other people in their positions, indicated only 23, 52 % of respondents.

• Which retirement age limits do the people propose?

### The hypothesis:

• The people with higher level of education propose higher ages for retirement. (The higher is the level of education the higher are the retirement age proposals.)

In order to propose the most suitable retirement age from the view of an individual as well as sustaining the public finances the majority (22) people agreed on the age 60 years. However it seems they were more concentrated on the age they want to retire, than the compromise between the age they want to retire and the age they should retire according to increasing life expectancy etc. The second most frequent age was 65 years, which is positive fact mainly for Czech politicians because 65 years is right the age which became a subject of the pension law draft in recent months, in other words at least someone has the same view as they have. The hypothesis which should help to assess whether the people with higher education propose higher retirement age or not shown, there was only insignificant dependence between the variables and therefore the second hypothesis was rejected as well.

• Assess the opinions of the respondents on their work performance (concerning productivity, familiarity with computers and attitude to trainings).

In general, three quarters of the respondents do not consider themselves less productive than the younger workers and their view was also supported by the companys representative who was interviewed, nevertheless he did not back up his claims by an evidence. He also added, the productivity might be judged individually.

More than 80 % of ageing respondents appeared familiar with using computers and internet and 86, 27 % of participants are willing to take part in a training or some educational course.

These two last findings and statements could be evaluated positively because this researched group de facto rejected some stereotypes which were argued about people in their ages and showed their interests and effort in todays development and society.

Finally, it is necessary to highlight, there are several limitations which the reader of this study need to bear in mind. Firstly, higher number of respondents will be needed to increase the reliability and validity of the research. Also, the possibility of conducting more interviews in companies and comparing their attitudes between them will help to specify the general view of employers to their ageing employees.

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# **APPENDICES**

# **Appendix A:** Questionnaire in Czech language

Dobrý den,
Jsem studentkou třetího ročníku University of Huddersfield, obor European Business a chtěla
bych Vás poprosit o vyplnění krátkého dotazníku, který je součástí mé závěrečné práce.
Všechny Vámi poskytnuté informace jsou anonymní a budou sloužit pouze k účelu
vypracování bakalářské práce.
Poté, co dotazník vyplníte a uložíte, odešlete jej, prosím, na mou e-mailovou adresu:
stromboli@centrum.cz
Děkuji za Váš čas a ochotu
Hezký den
Pavla Škorpilová
Pokyny pro vyplnění:
Kliknutím na příslušný rámeček, označíte Vámi vybranou odpověď. U odpovědí, kde máte
vyjádřít svůj názor, použijte určený rámec.
D.II. ∠ Ž□ /M□
Pohlaví: Ž 🗌 / M 🗍
Věk:
V CK.

Dokončené v	zdělání: základní	
	učiliště s výučním listem	
	učiliště s maturitou	]
	SŠ	
	VŠ	
	nmenali jste nedávné diskuze o problému d Ano pokračujte otázkou 2, pokud Ne př	<u> </u>
	te si, populační stárnutí představuje vážn se opakujícího procesu? Odůvodněte svůj	· · · · · · · · · · · · · · · · · · ·
3) Jak b	yste ohodnotili současný penzijní systém	ČR? Označte pouze jednu možnost.
velmi	dobrý 🗌 dobrý 📗 vyhovující 🔲	špatný 🗌 velmi špatný 🔲
4) Jak by vyhov A B C D	<ul> <li>Současný systém nepotřebuje žádná</li> <li>Posunout věk odchodu do důchodu</li> <li>Zavést povinné důchodové spoření,</li> </ul>	i vylepšení
· · · · · · · · · · · · · · · · · · ·	íváte možnosti důchodového pojištění či j d ano uveďte proč a jaký typ.	připojištění, životní pojištění atp.? Ano ☐ / Ne ☐

6)	Stanovte nejvhodnější věk pro odchod do důchodu, který je podle Vás nejvýhodnější jak z hlediska jednotlivce tak z hlediska udržitelnosti veřejných financí.
7)	Myslíte si, že by se věk odchodu do důchodu měl lišit podle pohlaví? Odůvodnětě svů názor.  Ano/ Ne
8)	Myslíte si, že lidé kteří pracují za těžkých fyzických či psychických podmínek s zaslouží dřívější odchod do důchodu než lidé pracující v méně náročném prostředí Pokud ano, uveď te příklady povolání, která by měla mít právo uplatňovat tento nárok.  Ano / Ne
9)	Cítili jste se někdy diskriminováni kvůli Vašemu věku? Ano \( \square\) / Ne \( \square\) Pokud ano uveďte za jakých okolností.
10)	Pociťujete nějaké specifické/odlišné chování ostatních zaměstanců na pracovišti kvůli Vašemu věku? Pokud ano, uveďte za jakých okolností.
11)	Domníváte se, že pracovníci po padesátce jsou méně produktivní? Ano \( \square / \) Ne \( \square \)

12) Používáte počítač? Pokud ano uveď	te jak často.	Ano [ ] / Ne [ ]
denně 🗌 v práci 🗌 3-5x týd	lně 📗 jednou týdně 🔲	příležitostně 🗌
13) Jste ochotni účastnit se firemních či	jiných školení, popřípadě re	kvalifikačních kurzů? Ano 🗌 / Ne 📗
14) Účastnili jste se již někdy školení (v rekvalifikačních kurzů atp.? Co pozi		mimo něj), Ano 🗌 / Ne 🔲
	_	
15) Co je pro Vás hlavním důvodem úča možnost.  A. Požadavek zaměstnavate B. Rozšíření obzorů a vědor C. Zlepšit své schopnosti a s D. Žádný důvod, školení jso E. Jiné:	le ností stát se perspektovnějším na t	
16) Uveďte, co je pro Vás hlavním moti pracovních výsledků? Očíslujte tvrz 1 nejmenší). Každé číslo může být p	ení číslicemi od jedné do pět	
A. Peníze a povýšení B. Konkurence mezi spolu C. Snažím se stále pracov D. Uznání kolegů, nadříze E. Další:	at co nejlépe, mám z toho lej	pší pocit
17) Jestliže jste momentálně zaměstnán/ této práci? Označte pouze dvě z uve		ody pro setrvání v
uspokojení finančních potřeb	má práce mě baví⊡	
dobrépracovní zázemí	dobré mezilidké vztahy na p	pracovišti 🗌
<b>,</b> .		

Uvažujete o hledání nové práce?	Ano 🗌 / Ne 🗍
18) Myslíte si, že je těžké najít vhodnou práci po 50ce a že jsou tito ob práce znevýhodňováni? Odůvodněte své tvrzení.	čané na našem trhu Ano
19) Viz. otázka 18, mate s tímto nějaké osobní zkušenosti?	Ano 🗌 / Ne 🔲
20) Jaká opatření pro vylepšení pozice starších pracovníků byste zaved	1/a?

Děkuji za Váš čas a spolupráci.

# **Appendix B:** Questionnaire in English language

Hello,		
	corpilová and I am a third year student at the Uni	versity of Huddersfield
-	course and I would like you to ask if you don't mir	
•	is part of my final year dissertation. All information	v
	ously and will serve only for research purpose of	•
wiii be neid anonyme	ously and will serve only for research purpose of	my aisseriation.
After filling in and so	aving the questionnaire, send it please to my e-ma	uil address:
stromboli@centrum.	cz	
Thank you for your t	ime and goodwill	
Have a nice day		
Pavla Škorpilová		
	Instructions:	
By clicking on appro	priate frame, you will indicate the answer you con	nsider as the right one.
By answers, where y	ou have to take your view, use appropriate frame	for replying.
	w	
Gender:	W / M	
Age:		
Level of education:	Elementary (two grades)	
	Training college with vocational certificate	
	Training college with school leaving exam	
	High school	
	University	

1)	Did you notice recent discussions about population ageing? Yes \( \subseteq / \text{No} \subseteq \) If Yes, continue to question 2, if not go to question 3.
2)	Do you think, population ageing presents real threat for society or is it just exaggeration of continuously repeating process? Why do you think so?  Yes / No
3)	How would you evaluate current pension system in the Czech Republic? Tick only one option.
	Very good Good Suitable Bad Very bad
4)	How would you improve current pension system? Tick all possibilities you agree with.  A.   Current pension system does not need any improvements  B.   Postpone retirement age limit  C.   Introduce compulsory pension savings, additional pension insurance  D.   Others:
5)	Do you use the possibility of saving for retirement, e.g. private pension insurance, additional pension insurance or life insurance? If yes, why and which one?  Yes / No
6)	Introduce exact retirement age, which is most suitable for both, individual person as well as for sustaining public finances in case of ageing population and workforce.

7)	Do you think the retirement should be different according to gender? Give reason or why not.  Yes \( \subseteq / \ N \)	_
8)	Do you think people who experience hard physical or psychical work deser earlier retirement than other groups of workers experiencing lesser demands? It which occupations should have the right to claim it?  Yes // No	f Yes
9)	Have you ever felt discriminated because of your age?  Yes / No If Yes, in what circumstances?	
10)	) Do you feel some special behaviour on the workplace because of your age? If Yes	s, in
	what circumstances?  Yes / No	) <u> </u>
11)	) Do you consider workers after 50 years of age less productive than the younger of Yes / N	
12)	Are you comfortable with using computer and Internet?  If Yes, how often do you use it?	
	Yes / No	) <u> </u>
	Daily At work 3-5 times a week Once a week Occasionally	
13)	Are you willing to participate on company or other trainings?  Yes / No	o 🗌

•	ng or requalification course? What positive did it
bring to you?	Yes  / No
<ul><li>E. Requirement of an emp</li><li>F. Extension of abilities an</li></ul>	nd knowledge ecome more perspective on the labour market
	onal elements for better work performance? Mark (5 strongest conviction, 1 weakest). Each number
J. Money and promotion K. Competition between L. When I know I work M. Recognition from the N. Others:	co-workers better, I feel better as well
17) If you are employed now, what are two possibilities.	the main reasons for staying in this job? Tick only
Financial need	I enjoy the job  Good relationships with colleagues
Are you considering finding a new	job? Yes \( \sum / \text{No} \( \sum \)

ey are disadvantaged Yes  / No /
Yes  / No
s?

Thank you for your time and cooperation.

## **Appendix C:** Interview with company representative

1) I was informed; TRW Lucas Varity s.r.o. is contributing its employees for supplementary pension insurance (with state contribution). What is the exact amount and why the company decided to contribute at all if is it not compulsory?

#### Interviewee:

The contribution is 400 CZK per person. The only condition the employee must fulfil to claim this benefit is to be employed in the company at least 3 years and the employee must already have supplementary pension insurance. By offering this benefit, the company rewards its workers for their good job and for their loyalty as well. The firm also wants to have positive share on the future of the company as well as the employees.

2) Is your company offering any other benefits or bonuses which could be useful especially for older employees?

#### Interviewee:

The benefits are available for all employees no matter how old they are. For example the company employs a private doctor, so the employees could pass all preventive medical examinations and get extraordinary medical care by the company doctor, they could be also vaccinated and use the possibilities of massages etc. They don't need to pay for it directly, but the fees are taken from the company's social fund.

3) What changed in your company's attitude towards older workers in last 5-10 years?

#### Interviewee:

I think no significant differences happened. The work is physically demanding, especially in manufacturing modules. Actually one working

module was established, especially for older people or pregnant women or for other who cannot do the work they used to do before.

4)	According to the planned increase of retirement age limit in the Czech Republic, is
	your company planning any special changes or actions in employment policy?

Interviewee:

No.

5) Do you have any evidence which can prove or reject that older employees (50+) are less productive than the other ones?

Interviewee:

No, there is no evidence. I think this is very individual, someone could be someone not, it depends on abilities of each person.

6) Do you know in which departments you have the highest number of older employees?

Interviewee:

It is quite balanced. In general, the total workers age can be considered as younger average.

7) Could you mention some departments, where the older employees proved more competent than the younger ones?

Interviewee:

Especially, thanks to their experiences, in departments of control, technology. Everywhere, where the experiences and practices needed.

8) Do you have any evidence that job injuries outweigh by younger employees or by

older ones?

Interviewee:

No.

9) Are there any differences in understanding and perception of informational

technologies through the age groups or are they all coping in the similar way?

Interviewee:

I think there are no significant problems in this particular area. Also

thanks to the continual human resources development, these handicaps

are removed by the trainings.

10) From your personal point of view, what are the most convincing pros and cons for

employing older person (50+)?

Interviewee:

As I said, the advantages of these people are their experiences.

Qualified people could be of good use especially in running the crisis

control centres or in consultant firms. But on the other hand employing

someone who has to retire in two years is not very good from the

company standpoint, because it is not worth to invest in him, because

until the investment of the company returns, the person will be long

retired.

(Authors note: No other disadvantages noticed)

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## **Appendix D:** Additional results

## **Age discrimination**

Although so called anti-discrimination law practically says age discrimination and other discriminations based on gender, sex, race etc. are prohibited, the age-discrimination still prevails in our society. 16 respondents mentioned, they have ever felt discriminated because of their age and 7 of them experienced age discrimination during applying for a new job. Majority of them confessed, the companies prefer rather younger and more perspective workers, who are usually more skilled in languages and in using new technologies. On the other hand, only 5, 88% of all participants feel different behaviour of colleagues on the workplace because of their age but they did not suggest any reason, why they think the behaviour is caused by their age and not by something else.

### Motivational elements for better work performance

ValueA-money, promotionB-competition between colleaguesC- self confidence from workD-recognition of boss, family etc.E-others

In question 16, respondents were asked to set together a priority ladder describing their motivational elements for better work performance. The majority (10 people) appointed as the most important motivational element money and possibility of promotion (5A). Second one was their own confidence with their

work and good feeling from it (4C), next selected as third most important was recognition of boss, colleagues and family (3D) and on the last position ended the need of competition between colleagues (2B). Other priorities ladder was common to next 6 respondents and was built 5C, 4D, 3A, 2B. Last set with frequency of 4 respondents which will be mentioned is 5C, 4A, 3D, 2B. Rest of respondents pointed out only one, two or three options or one number with more letters etc. so the ladder was not complete. Considering other elements few people mentioned what else helps them to perform better and it was if they enjoy the work; if there is a possibility that the performance prevails and remains for the future; if the clients or people you work for appreciate your achievement or only the feeling of need and usefulness which will help to self-fulfilment.

### Stereotypes about older people

76, 47% of respondents are persuaded that the people aged 50 and more are disadvantaged on the Czech labour market and only 5, 23% of them acknowledged that this market denial is based on their real weaknesses, lower productivity and deteriorated health. Absolutely opposite opinion shared 11 participants who argued, that everyone who really want to work will always find a job. But on the other hand, some of them admitted although the person will find a job it is not supposed to meet his/her requirements. It is also decisive, in which sector or industry and where is the person looking for the job. It is more probable, that the older person would get the job in area where there is a lack of qualified people with his specialization. The remaining 70% were blaming today's society together with negative influence from medias and also new younger management in companies which want to create their teams and working groups only with younger workers as well. As also argued, younger employees are easily manipulated as one Czech saying explains: "Young wand is easier to bend. "And as mentioned above investments into older human capital has significantly less economic return than investing into younger one.

Therefore, at the end of the questionnaire, everyone was asked to propose some improvements of older workers positions in our society. 27 of all 51 questioned people did not suggest any improvements proposals, whereas other 8 see the main problem in education and attitude of young generation to older ones. Therefore, the whole transformation should begin in families where everyone should learn to respect and be regardful towards seniors. But only few people stated ideas which could be used as useful improvement of social or employee policy (after detailed advancements and elaboration of qualified people). The necessity of adjusting the different working process for these people, enable them to work more flexibly. The state should encourage the companies in employing workers after their 50s. Requalification and language courses for older employees should be also more accessible and also more financially available.