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in the Czech Republic and their Potential
Impact on the Labour Market**

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Demographic Developments in the Czech Republic and their Potential Impact on the Labour Market

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Summary:

Human labour, as one of the most important means of production, has a major impact on the development of an economy and its competitiveness. The text below will focus on selected issues related to the labour market and workforce in the Czech Republic, primarily those influenced by demographic developments. In this respect, the change in the age structure of the population is the most significant factor, as it both reflects in the present situation on the labour market and foreshadows future problems on the market. In order to address these problems, or to turn them into an advantage, the Czech labour market must be functional and flexible not only on the macro-economic level, but also on the micro-economic level, i.e., on the level of companies.

Keywords: demographic developments, labour market

Demografický vývoj v České republice a jeho možné dopady na trh práce

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Abstrakt:

Lidská práce jako jeden z nejdůležitějších výrobních prostředků výrazně spoluurčuje výkon ekonomik a jejich konkurenceschopnost. Následující text se zaměří na vybrané problémy spjaté s trhem práce a pracovní silou v České republice, zejména na ty, které jsou ovlivněny demografickým vývojem. Nejvýznamnějším faktorem z tohoto úhlu pohledu je změna věkové struktury obyvatelstva, která se promítá jak do současné situace na trhu práce, tak predikuje i budoucí problémy na tomto trhu. Aby bylo možné problémy řešit či je dokonce zvrátit ve výhodu, je nutné, aby český trh práce byl funkční a flexibilní nejen na makroekonomické úrovni, ale i na úrovni mikroekonomické – tedy na úrovni firem.

Klíčová slova: demografický vývoj, trh práce

JEL: J11, J21, N30

Reviewer: Prof. Ing. Lenka Pražská, CSc.

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Introduction

Human capital is one of the four factors constituting the so-called home economic base (so-called Porter's diamond). The performance and quality of this home base is the springboard for a country's competitiveness in global competition. Human capital is meant here not in terms of its "quantity", but rather, in terms of "quality". Only cultivated and educated workforce, capable of innovative and creative through, may create the desired added value. The state should, above all, ensure conditions for high-quality education here.

Nevertheless, the labour market is shaped by the number of economically active persons involved in it. This aspect of the supply side of the labour market is directly influenced by the demographic developments in the given country. After 1990, in connection with the changes in Czech society, not only the economy changed, but also the society's behaviour in general, which reflected, among other things, in demographic changes.

Aside from the present situation, it is important to monitor the demographic development predictions so that the labour market would be ready for potential problems, and able to respond to them flexibly and in good time. Employers must cope with changes in the age and educational structure of employees.

1. Demographic developments

The basic demographic characteristic is the number of inhabitants and their age structure, or, more precisely, division into age groups.

Tab. 1: The population's age structure in absolute figures (in thousand)

| Age | 1975 | 1989 | 1995 | 2000 | 2001 |
|-------|--------|--------|--------|--------|--------|
| All | 10 094 | 10 371 | 10 321 | 10 267 | 10 206 |
| 0-14 | 2 253 | 2 253 | 1 893 | 1 664 | 1 622 |
| 15-64 | 6 510 | 6 826 | 7 056 | 7 179 | 7 170 |
| 65+ | 1 330 | 1 292 | 1 372 | 1 423 | 1 415 |
| 80+ | 169 | - | 277 | 250 | 260 |
| Age | 2002 | 2003 | 2004 | 2005 | 2006 |
| All | 10 203 | 10 211 | 10 221 | 10 251 | 10 287 |
| 0-14 | 1 590 | 1 554 | 1 527 | 1 501 | 1 480 |
| 15-64 | 7 196 | 7 234 | 7 259 | 7 293 | 7 325 |
| 65+ | 1 418 | 1 423 | 1 435 | 1 456 | 1 482 |
| 80+ | 277 | 293 | 308 | 322 | 336 |

Source: Czech Statistical Office.

After 1989, the total number of inhabitants declined continuously until 2003, when this trend was reversed. As much as this fact may sound positive, a detailed look at the various age categories shows that this is not a “natural” increase due to preproduction. The increase in the number of inhabitants is occurring primarily in the category from 15-64 years (given that the statistic has started to reflect migration, or, more precisely, the influx of immigrants, it is evident that this category accounted for the main part of the increase), and in the category of seniors. This fact is much more evident when we see the age structure of the population expressed in percentage figures.

Tab. 2: Relative age structure of the population (in %)

| Age | 1975 | 1989 | 1995 | 2000 | 2001 |
|-------|-------|-------|-------|-------|-------|
| Total | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 |
| 0-14 | 22,3 | 21,7 | 18,3 | 16,2 | 15,9 |
| 15-64 | 64,5 | 65,8 | 68,4 | 69,9 | 70,2 |
| 65+ | 13,2 | 12,4 | 13,3 | 13,9 | 13,9 |
| 80+ | 1,7 | - | 2,7 | 2,4 | 2,6 |
| Age | 2002 | 2003 | 2004 | 2005 | 2006 |
| Total | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 |
| 0-14 | 15,6 | 15,2 | 15,0 | 14,6 | 14,4 |
| 15-64 | 70,5 | 70,9 | 71,0 | 71,2 | 71,2 |
| 65+ | 13,9 | 13,9 | 14,0 | 14,2 | 14,4 |
| 80+ | 2,6 | 2,9 | 3,0 | 3,1 | 3,3 |

Source: Czech Statistical Office.

The proportion of children (aged 0-14) in the population structure is declining, and the number of children is decreasing even in absolute figures. There is no agreement as to the cause of that decline, although two basic lines explaining the phenomena have crystallised. The first looks for reasons in the worsened financial situation of young families, primarily due to an increase in prices, rent, etc. It also points to social uncertainty and the resulting unwillingness of young couples to have a child, or more than one child. The second explanation looks for the causes of the decreased birth rate in a lifestyle change, especially among young people, i.e., the potential parents. They have many more options to obtain education (a broad range of public as well as private schools and institutes, and the young people are no longer limited in their choice by instructions from the state), travel, pursue their hobbies And they have opportunity to build interesting professional careers for themselves. All this changed people's lifestyle, as the family is no longer the only (or one of the few) way of applying oneself. Hence, young people postpone starting a family until they are older. Given that frequently it is well-situated people, with great opportunities of finding application in their professional lives, who is postponing the starting of a family, we could say that this explanation is closer to the truth (on the other hand, relevant sociological research has yet to be

carried out in this sphere). And last, but not least, access to high-quality contraception and better information of young women in this area may play a role, so that there are fewer children born due to unplanned (or unwanted) pregnancies. The table below documents the decline in birth rate (fertility), as well as the increasing age of mothers when they give birth to their first child.

Tab. 3: Indicator of birth rate (fertility) and average age of mother at the birth of her first child

| Indicator | 1991 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Fertility | 1,86 | 1,28 | 1,19 | 1,17 | 1,16 | 1,13 | 1,14 | 1,15 | 1,17 |
| Mother's age | 22,40 | 23,30 | 23,70 | 24,00 | 24,40 | 24,60 | 24,90 | 25,30 | 25,60 |

Source: Czech Statistical Office.

The analysis of the declining number of children must take into account that around 1989, the birth rate wave was high up due to the baby-boomers born in the 1970s. These “boomers” gradually moved to the 15-64 category, having caused an increase in this group's share in the population. It is becoming evident that this trend has probably reached its end and the percentage representation is starting to stagnate. On the other hand, the category of seniors (aged 65+) is getting stronger, as the strong post-war years have moved into that category. Also, the average age is increasing. The causes usually stated in this respect are higher standard of living and better health care. The following indexes offer a different angle.

Tab. 4: Indexes

| Index | 1975 | 1989 | 1995 | 2000 | 2001 |
|-----------------------|-------------|-------------|-------------|-------------|-------------|
| Age index | 59,1 | 57,3 | 72,5 | 85,5 | 87,2 |
| Economic burden index | 55,0 | 51,9 | 46,3 | 43,0 | 42,3 |
| Index | 2002 | 2003 | 2004 | 2005 | 2006 |
| Age index | 89,2 | 91,6 | 94,0 | 97,0 | 100,2 |
| Economic burden index | 41,8 | 41,2 | 40,8 | 40,6 | 40,4 |

Source: Czech Statistical Office.

The age index expresses the number of seniors (aged 65+) per 100 children (aged 0-14). This index has gradually increased, and in 2006, it increased beyond 100, which means that the number of seniors exceeded the number of children. This is of great significance for further demographic developments – children are future economically active people and potential future parents.

Furthermore, both categories represent a burden for the country's budget, albeit each in a different way (see below).

The economic burden index means the number of children and seniors per 100 economically active inhabitants (aged 15 to 64). The development of that index has been positive, as the number of economically dependent persons decreases. With the relatively strong population years moving to the productive age, and with the declining birth rate, a so-called demographic bonus (sometimes also called demographic dividend) is being created. This is caused by the alternation of strong and weaker population years, irregularities in demographic development. The state should make use of that demographic bonus and strengthen the economy and generate resources for the necessary social expenditures in the future.

2. Prediction of Demographic Developments

The Czech Statistical Office regularly produces prognoses of demographic data. The data provided below is from the last survey, carried out in 2003.

The resulting data – the number and structure of inhabitants – are predicted on the basis of an estimate (or, projection) of the aggregate birth rate and the average life expectancy. Given that foreigners with a long-term permit are included in the number of inhabitants of the Czech Republic, the expected balance in migration is also taken into account. Three variants of this prognosis have been developed:

Low

Medium

High

All three variants assume a higher birth rate, with the low variant expecting the lowest birth rate and the high variant the highest. All variants also expect an increasing average life expectancy both for men and for women. Again, the low variant predicts the lowest increase and the high the highest. Also, the estimated level of migration differs. The medium variant does not necessarily have to be the most probable one (although it is often understood and interpreted that way); it is a variant which falls within the range set out by the extreme variants. None of the variants includes – for understandable reasons – unforeseeable influences, such as deaths due to an epidemic illness or a natural or war catastrophe.

Tab. 5: Overall birth rate (fertility)

| Variant | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|---------|------|------|------|------|------|------|------|------|------|------|
| Low | 1,19 | 1,23 | 1,27 | 1,31 | 1,34 | 1,38 | 1,39 | 1,40 | 1,41 | 1,42 |
| Medium | 1,23 | 1,30 | 1,38 | 1,45 | 1,53 | 1,60 | 1,61 | 1,61 | 1,62 | 1,62 |
| High | 1,28 | 1,36 | 1,46 | 1,55 | 1,65 | 1,75 | 1,75 | 1,76 | 1,76 | 1,77 |

Source: Czech Statistical Office.

All variants expect a more significant increase in birth rate until about 2030, and consider 1999 the low-point: then, this indicator was at 1.13 (see text above). The expected development will be related primarily with the trend to postpone motherhood until a higher age. Also, the children of the 1970s baby-boomers may influence the population increase, as potential parents. After 2030, only a slight increase or stagnation is expected. But none of the variants expects a birth rate over 2, which means that simple reproduction will not be ensured. This will naturally lead to the decrease of the total number of inhabitants (see below).

Tab. 6: Average age of mothers

| Variant | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|---------|------|------|------|------|------|------|------|------|------|------|
| Low | 28,2 | 28,3 | 28,5 | 28,7 | 28,8 | 29,0 | 29,0 | 29,0 | 29,0 | 29,1 |
| Medium | 28,2 | 28,3 | 28,6 | 28,9 | 29,2 | 29,4 | 29,4 | 29,4 | 29,4 | 29,5 |
| High | 28,4 | 28,7 | 29,0 | 29,3 | 29,6 | 29,9 | 29,9 | 30,0 | 30,0 | 30,1 |

Source: Czech Statistical Office.

As for the average age of mothers, all variants expect it to increase, but none of them expects a marked increase. The greatest change in this respect has already occurred in the 1990s. The division of birth rate according to age-groups offers another angle, with the medium variant being available.

**Tab. 7: Birth rate according to age of mother
in % of distribution, middle version**

| Age | 2002 | 2010 | 2020 | 2030 | 2040 | 2050 |
|-------|------|------|------|------|------|------|
| 15-19 | 4,9 | 4,2 | 3,2 | 2,5 | 2,5 | 2,4 |
| 20-24 | 24,4 | 22,1 | 18,6 | 15,7 | 15,6 | 15,5 |
| 25-29 | 40,0 | 38,1 | 37,2 | 36,5 | 36,4 | 36,3 |
| 30-34 | 22,2 | 25,5 | 29,7 | 33,2 | 33,3 | 33,4 |
| 35+ | 8,5 | 10,1 | 11,2 | 12,1 | 12,3 | 12,4 |

Source: Czech Statistical Office.

In this version there is an unequivocally documented expected trend of a shift of motherhood to a later age, i.e. increasing average age of mothers. A fairly major drop in parents if the first two age groups as well as a drop in the 25-29 year-old age group in favour of the 30-34 year-old mother age category. At the same time, there will be a rise in the number of birthing mothers over the age of

35. When we add up the data, then we see that at the beginning of the millennium, only around 30 % of (birthing) mothers, but with this presumed development, they will represent almost half of all mothers by the year 2030. This carries with it not only changes in lifestyle but it will also be reflected into needs in the working sphere (see below).

Changes in the age structure of the population – far more than the fall of the birth rate – will be influenced by the number of inhabitants in the senior citizen category (age 65 and more).

Tab. 8: Life expectancy at birth – men

| Variant | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|---------|------|------|------|------|------|------|------|------|------|------|
| Low | 72,3 | 72,9 | 73,5 | 74,2 | 74,8 | 75,4 | 76,0 | 76,6 | 77,2 | 77,8 |
| Medium | 72,4 | 73,1 | 73,8 | 74,5 | 75,3 | 76,0 | 76,7 | 77,5 | 78,2 | 78,9 |
| High | 72,4 | 73,3 | 74,2 | 75,1 | 76,0 | 76,8 | 77,7 | 78,6 | 79,5 | 80,3 |

Source: Czech Statistical Office.

Tab. 9: Life expectancy at birth – women

| Variant | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|---------|------|------|------|------|------|------|------|------|------|------|
| Low | 78,8 | 79,3 | 79,8 | 80,3 | 80,8 | 81,3 | 81,8 | 82,3 | 82,8 | 83,3 |
| Medium | 78,8 | 79,4 | 80,1 | 80,7 | 81,3 | 81,9 | 82,6 | 83,2 | 83,8 | 84,5 |
| High | 78,9 | 79,7 | 80,4 | 81,2 | 82,0 | 82,8 | 83,6 | 84,4 | 85,2 | 86,0 |

Source: Czech Statistical Office.

In both categories (men, women) and in all versions, the life expectancy is rising which means a growth in the average age of the individual. Women have the chance to live on average to a higher age than men, although the tempo of the rise in the life expectancy is higher for men.

Migration is also a factor which affects the structure and especially the size of the population, the balance expected is positive in all versions. In practice this means an influx of immigrants to the Czech Republic.

Tab. 10: Expected balance of migration

| Variant | Saldo |
|---------|--------|
| Low | 10 000 |
| Medium | 25 000 |
| High | 40 000 |

Source: Czech Statistical Office.

An influx of immigrants can be mainly expected in the middle age category (15-64 years old), which is the category of economically active population. In this case it unequivocally means a possibility of the recovery of the crash on the job

market in relation to the relative (and absolute) drop in inhabitants of a productive age.

The following tables show separate versions for demographic development in absolute and a relative values.

**Tab. 11: Demographic development
– projection, low version, absolute**

| Age | 2005 | 2010 | 2015 | 2020 | 2025 |
|-------|--------|--------|--------|-------|-------|
| All | 10 201 | 10 141 | 10 034 | 9 875 | 9 657 |
| 0-14 | 1 483 | 1 369 | 1 352 | 1 282 | 1 180 |
| 15-64 | 7 272 | 7 181 | 6 832 | 6 537 | 6 337 |
| 65+ | 1 446 | 1 591 | 1 849 | 2 055 | 2 141 |
| Age | 2030 | 2035 | 2040 | 2045 | 2050 |
| All | 9 386 | 9 080 | 8 753 | 8 414 | 8 066 |
| 0-14 | 1 079 | 1 002 | 956 | 923 | 879 |
| 15-64 | 6 097 | 5 820 | 5 354 | 4 872 | 4 526 |
| 65+ | 2 217 | 2 259 | 2 443 | 2 620 | 2 661 |

Source: Czech Statistical Office.

**Tab. 12: Demographic development
– projection, low version, relative (in %)**

| Age | 2005 | 2010 | 2015 | 2020 | 2025 |
|-------|-------|-------|-------|-------|-------|
| Total | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 |
| 0-14 | 14,5 | 13,5 | 13,5 | 13,0 | 12,2 |
| 15-64 | 71,3 | 70,8 | 68,1 | 66,2 | 65,6 |
| 65+ | 14,2 | 15,7 | 18,4 | 20,8 | 22,2 |
| Age | 2030 | 2035 | 2040 | 2045 | 2050 |
| Total | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 |
| 0-14 | 11,5 | 11,0 | 10,9 | 11,0 | 10,9 |
| 15-64 | 65,0 | 64,1 | 61,2 | 57,9 | 56,1 |
| 65+ | 23,6 | 24,9 | 27,9 | 31,1 | 33,0 |

Source: Czech Statistical Office.

The low version assumes the least desirable development particularly from the point of view of children as the future productive forces. Basically a third (or almost a third) of the population made up of senior citizens is expected in each version. A drop in the total population of around 2 million is also expected.

Tab. 13: Demographic development
– projection, middle version, absolute

| Age | 2005 | 2010 | 2015 | 2020 | 2025 |
|------------|-------------|-------------|-------------|-------------|-------------|
| All | 10 236 | 10 283 | 10 302 | 10 284 | 10 217 |
| 0-14 | 1 487 | 1 400 | 1 426 | 1 409 | 1 346 |
| 15-64 | 7 302 | 7 286 | 7 011 | 6 787 | 6 670 |
| 65+ | 1 447 | 1 597 | 1 864 | 2 088 | 2 201 |
| Age | 2030 | 2035 | 2040 | 2045 | 2050 |
| All | 10 102 | 9 957 | 9 795 | 9 622 | 9 438 |
| 0-14 | 1 274 | 1 220 | 1 197 | 1 190 | 1 173 |
| 15-64 | 6 520 | 6 337 | 5 965 | 5 570 | 5 309 |
| 65+ | 2 308 | 2 400 | 2 634 | 2 862 | 2 956 |

Source: Czech Statistical Office.

Tab. 14: Demographic development
– projection, middle version, relative (in %)

| Age | 2005 | 2010 | 2015 | 2020 | 2025 |
|------------|-------------|-------------|-------------|-------------|-------------|
| Total | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 |
| 0-14 | 14,5 | 13,6 | 13,8 | 13,7 | 13,2 |
| 15-64 | 71,3 | 70,9 | 68,1 | 66,0 | 65,3 |
| 65+ | 14,1 | 15,5 | 18,1 | 20,3 | 21,5 |
| Age | 2030 | 2035 | 2040 | 2045 | 2050 |
| Total | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 |
| 0-14 | 12,6 | 12,2 | 12,2 | 12,4 | 12,4 |
| 15-64 | 64,5 | 63,6 | 60,9 | 57,9 | 56,3 |
| 65+ | 22,8 | 24,1 | 26,9 | 29,7 | 31,3 |

Source: Czech Statistical Office.

The middle version chooses a slower tempo in the drop of the percentage representation of children, or a rise in the representation of senior citizens, in any case an almost unchanged representation of economically active elements of the population. The drop in the overall population is lower – around 800 thousand.

**Tab. 15: Demographic development
– projection, high version, absolute**

| Age | 2005 | 2010 | 2015 | 2020 | 2025 |
|------------|-------------|-------------|-------------|-------------|-------------|
| All | 10 273 | 10 432 | 10 578 | 10 700 | 10 782 |
| 0-14 | 1 493 | 1 436 | 1 503 | 1 531 | 1 499 |
| 15-64 | 7 332 | 7 392 | 7 192 | 7 040 | 7 009 |
| 65+ | 1 448 | 1 604 | 1 884 | 2 129 | 2 274 |
| Age | 2030 | 2035 | 2040 | 2045 | 2050 |
| All | 10 823 | 10 837 | 10 842 | 10 481 | 10 830 |
| 0-14 | 1 451 | 1 415 | 1 415 | 1 439 | 1 455 |
| 15-64 | 6 949 | 6 856 | 6 569 | 6 256 | 6 072 |
| 65+ | 2 424 | 2 567 | 2 857 | 3 147 | 3 304 |

Source: Czech Statistical Office.

**Tab. 16: Demographic development
– projection, high version, relative (in %)**

| Age | 2005 | 2010 | 2015 | 2020 | 2025 |
|------------|-------------|-------------|-------------|-------------|-------------|
| Total | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 |
| 0-14 | 14,5 | 13,8 | 14,2 | 14,3 | 13,9 |
| 15-64 | 71,4 | 70,9 | 68,0 | 65,8 | 65,0 |
| 65+ | 14,1 | 15,4 | 17,8 | 19,9 | 21,1 |
| Age | 2030 | 2035 | 2040 | 2045 | 2050 |
| Total | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 |
| 0-14 | 13,4 | 13,1 | 13,1 | 13,3 | 13,4 |
| 15-64 | 64,2 | 63,3 | 60,6 | 57,7 | 56,1 |
| 65+ | 22,4 | 23,7 | 26,4 | 29,0 | 30,5 |

Source: Czech Statistical Office.

The high version assumes a slight growth in the total number of inhabitants of almost 600 thousand. Nevertheless, in this version too, the proportion of the productive elements of the population is on an almost identical level to the previously mentioned versions and trends from a point of view of the representation of the number of children and number of senior citizens. The number is more optimistic particularly from a point of view of the birth rate (see above), but not even this can stop the drop of the proportion of children in the population.

3. Possible effects of predicted demographic development

If we calculate the age index then, according to possible demographic development, future society appears to be one where there will be more senior citizens than children. At present, both categories have almost the same representation in the population, despite the fact that in 2006, senior citizens

began to slightly outweigh children by 100 children to 100.2 senior citizens. In the future prognoses assume that there will be twice as many (high version) or even three times as many (low version) senior citizens than children.

Tab. 17: Age index

| Variant | 2005 | 2010 | 2015 | 2020 | 2025 |
|----------------|-------------|-------------|-------------|-------------|-------------|
| Low | 97,5 | 116,2 | 136,8 | 160,3 | 181,4 |
| Medium | 97,3 | 114,1 | 130,7 | 148,3 | 163,5 |
| High | 96,9 | 111,7 | 125,3 | 139,1 | 151,8 |
| Variant | 2030 | 2035 | 2040 | 2045 | 2050 |
| Low | 205,5 | 225,4 | 255,5 | 283,9 | 302,7 |
| Medium | 181,1 | 196,8 | 220,0 | 240,4 | 252,0 |
| High | 167,1 | 181,4 | 201,9 | 218,8 | 227,1 |

Source: Czech Statistical Office, own calculation.

This situation will create pressure on redistribution of funds in the state budget in favour of benefits for senior citizens. This will probably result in spending cuts for education and support for young families in favour of spending in healthcare and social security.

Tab. 18: Economic burden index

| Variant | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2050 |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Low | 40,3 | 41,2 | 46,9 | 51,0 | 52,4 | 54,1 | 56,0 | 63,5 | 72,7 | 78,2 |
| Medium | 40,2 | 41,1 | 46,9 | 51,5 | 53,2 | 54,9 | 57,1 | 64,2 | 72,8 | 77,8 |
| High | 40,1 | 41,1 | 47,1 | 52,0 | 53,8 | 55,8 | 58,1 | 65,0 | 73,3 | 78,4 |

Source: Czech Statistical Office, own calculation.

The index of economic burden is represented by the number of persons economically dependent on 100 people of a productive age. All versions predict a growth in economic burden and even though the tempos slightly differ, they come to almost the same figures while an acceleration of the growth in economic burden is expected after the year 2035.

Regarding the absolute and relative drop in the representation of children in the population, it is unarguable that the increase of economical burden will be due to the senior elements of the population. This means a significant burden on social systems (pension systems). The situation is not particularly helped by the attempts of the state to increase the retirement age for workers, since life expectancy is quickly increasing. This can also raise problems in the company sphere (see below).

If we compare the basic factors which are reflected in demographic development, then each of them has its effect and will affect the job market at a company level in a different way.

The change in lifestyle brings with it several changes. The length of study is lengthening due to new possibilities and a greater emphasis on education. Some young people go to study languages abroad or gather experiences travelling and exploring other cultures. A result of this is a rising number of young people of productive age (24-30 years old) registering at job agencies without work experience and standard work routines. Most companies, however, require work experience from their new employees, so there is an increased demand for temporary positions with flexible working hours which would allow part-time employment for e.g. students in higher education.

So-called “dual” educational systems (as used in German companies) when employees alternate between full-time employment and periodical leave for intensive study, is practically non-existent in the Czech Republic.

The average age at which women start a family is rising. Motherhood is being postponed until the woman has finished her education and usually has gained some work experience or built up a qualified position. She will probably try to join the employment process after maternity and parental leave sooner than until now. This creates requirements for flexibly functioning employment systems, the possibility for shorter working hours and working from home (using techniques that allow this). Also, there is an increase in demands for institutions offering quality childcare with a flexible regime.

The increasing amount of the population of 65 years old and above will create a large group of working senior citizens through raising the retirement age. Apart from the undisputable benefits this brings with it a range of problems especially in plants with production lines and other physically demanding work. These problems will gradually grow as this category increases its place in the population.

Migration is also affecting demographic development since the active balance shows that we are a destination for immigration. Most immigrants are of a productive age and their social and working integration is expected. This introduces pressure for an active state immigration policy to support desirable immigration (e.g. to supplement the structure of the workforce where domestic sources are insufficient) and to eliminate undesirable immigration (e.g. that associated with criminality, illegal employment etc.). At a company level this means creating such a climate which would facilitate integration of foreigners, take steps to eliminate cultural prejudices, removing cultural barriers and suppressing cultural conflict. This is of utmost importance since the number of immigrants who consider the Czech Republic as their target country will increase.

Conclusion

Demographic development in the Czech Republic has been significantly influenced by changes which are related to the social and economic processes after 1989. The number of children in the population is falling which the number of senior citizens is raising. This trend is also confirmed by the Czech Statistical Office prognosis which has been compiled in three versions: low, middle and high.

All predicted versions presume a slight growth in the birth rate (fertility) roughly until the year 2035, after which it will stagnate with the current increase in the average mother's age, or the postponement of the decision to start a family until a later age of the mother. Even so, the proportion of children in the population will fall. On the other hand the proportion of senior citizens will rise due to the transition of population boom years into this category and also due to the increase in the average length of life both in men and women. This fact will mean that both the age index and the economical burden index will rise. The result will be significant strain on the state budget and social security systems and also an attempt (or necessity) to divide funds in the favour of senior citizens. The state should therefore devote itself more intensively to possible development and mainly find a solution before the problems grow to dimensions that are hard to solve. Now is a suitable time since the demographic development offers a demographic dividend, i.e. the fluctuating population wave has increased the proportion of the population of a productive age.

The expected demographic development will also present new challenges to companies. They will be compelled to deal with the mothers' demands (of those qualified, in high positions) for flexible employment systems, with a growth in the senior citizen employee category and, no less importantly, the influx of immigrants to the employment environment. The seeds of possible problems resulting from the above facts must be already addressed by companies today. It would be useful if they shared their experiences. It would also be desirable that even companies who are not yet affected by such problems should become aware of them and consider possible remedies for the future.

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