

# AGEING POPULATION - A THREAT OR A CHALLENGE?

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## ABSTRACT

Ageing population is often taken as a threat for prosperity of the economy and society as a whole. Changing population structure leads to necessary changes in many fields of life. There are many examples of solving the problem of ageing by providing special goods and services, doing structural changes in industries and employment, and so to take ageing as a challenge for future development. The group of seniors is very diversified and so diverse must be also activities that satisfy needs and wishes of older people. There is a source of social harmony and welfare of the society.

## JEL CLASSIFICATION & KEYWORDS

■ D1 ■ E2 ■ J14 ■ AGEING ■ POPULATION ■ SOCIETY ■ STRUCTURE ■ SERVICES

## INTRODUCTION

The Czech Republic is not an exception in facing a strong and steady tendency to ageing of the population as other countries do. So we can see deep changes in population structure, given not only by increasing share of aged people, but also by decreasing share of the young. In majority of developed countries the share of older people quickly grows and so this group of people will have increasing impact on demand and the economy as a whole, not only thanks to growing number of elderly people, but also to their income possibilities, changing needs, specific behaviour patterns, time constraints, health risks and their participation in social life.

Focusing on those phenomena can be one of important keys to social welfare understanding. Recognition of age determined changes in demand and economy is very important for planning long term investment and production. Those changes will have a strong impact on structural changes in the economy and also on labour force movement among industries, employment, on trade and naturally on government spending, taxation and other characteristics of the economy.

Ageing population can lead to negative consequences that have been perceived now, but on the other hand, this makes a big demographic challenge. The young generation takes responsibility of treating aged people, and at the same moment, there is a decreasing share of the young in the population. But besides that ageing population makes new impulses for production and trade and younger generation is expected to reach higher productivity of their work, so as to create enough sources for prosperity of the economy as a whole and all social groups in the society.

In the civilized society the intergeneration harmony can be the source of welfare and prosperity. Social tensions and intergenerational opposition cannot bring anything positive.

### The age phenomenon

Ageing is a process that has many dimensions dependent on a particular social, cultural, psychical and physical

context. The pace of ageing is individual and it is difficult to define ageing. The basic method is to define ageing by the help of particular years or by social position. Such methods have some limits because two people of the same age and social position can be very different. So it is easier to define ageing periods by basic characteristics of personality – the degree of activities, abilities and mobility.

Ageing is a very individual process and people in the same period of life can be very different. Social development changes life conditions and people can react to this in a different way in their new needs. And at last, it is often difficult to say whether new needs of people are the result of ageing or of changes in social, economic, cultural, technological etc. environment.

Majority of Czech people assume seniority starts at 65, which can be connected with reaching pension age. But a person is considered to be old not only of the age of 65 and more, but in connection with loosing ability to take care of oneself, with worsening health state or the inability to take and evaluate new impetuses. There may exist other criteria of becoming old, but nevertheless it makes sense to take people old according to whether they go to retirement or not, because it is a very significant feature connected with ageing bringing a deep change in life style and consumption.

The group of old people is not unified. At first it is necessary to say that there is a remarkable difference between external and internal view on who are old people. External view of aged people shows that the younger the reviewer is the lower age seems to him to be an old age. In practice people over 50 are often taken to be old by the young. Especially when looking for working opportunities. Internal view on who is the old is very different – older age people look at themselves according to their life abilities, life possibilities and personal relations to their close people and neighbourhood.

Having as a criterion the moment of going to retirement there are people who are very active, have many interests, hobbies and activities and intensive communication with their environment. Some of them work further combining pension and job, some are engaged in other activities. According to Czech Statistical Office, there are about 2 million pensioners in the Czech Republic, which is about 20 % of total population. Among pensioners, there are about 250 thousand persons still working while taking pensions.

There are also big differences in income possibilities – people with very low pensions and without any financial reserves on one hand, and relatively wealthy people on the other. It is obviously a result of their previous activities, but also of their approach to life under pension. Majority of people expect the state to take care of them and only about 50 % people in pre-pension age make financial reserves for retirement. People in the Czech Republic do not count on financial support from their children (in opposition – many older people support their families by pensions). Many people expect coming pension without clear and well-

thought-out financial plan, with insufficient savings and in a rental flat (19 % persons live in risky flats) – partly due to low wages and partly due to their approach to the future (Slapak, 2010).

The state of health can also be very different. Those factors lead to a big diversity among this particular group of population, and that is why it is so difficult to formulate some principles about characteristic features of their consumption and so about their demand. On the other hand there are other social groups (unemployed pre-pensioners etc.) whose consumption has similar characteristics.

#### Mapping the nature of ageing in the economy

There are many surveys in developed countries finding out the patterns of consumption of various groups of households, including those of pensioners, let us mention at least United Kingdom, France, Belgium etc. Their method can be inspiring for our society, too.

In the United Kingdom Family Expenditure Surveys and Expenditure and Food Surveys take place since 1978. Melanie Lührmann (2007) processed data from surveys done between 1978 and 2004, covering 7000 households that made a detailed record of their expenditures for two weeks. Then 11 composite goods were defined (food consumed at home, food consumed outside home, alcohol & tobacco, fuel & light, household goods, household services, clothing & shoes, personal goods & services, motoring & public transport, leisure goods, leisure services). All goods and services were quoted in 1987 prices. Then the results for different age groups of households were formulated.

The survey, its methodology and results can be inspiring for us. The main trends observed in those surveys show a principal decrease of necessities expenditure share on the whole income (food consumed at home, fuel & light, household goods, alcohol & tobacco) and increasing demand for all kinds of services (household services, leisure services and personal goods & services). Increasing share of personal goods is based on out-of-pocket expenditures on drugs, medical treatment, health care not paid by insurance offices, and beauty expenses. Transport expenses go down, maybe because of limited movability of older people and decreasing domestic consumption (older people hesitate whether to change the car or not). There are then increasing expenditures on food consumed outside home.

Another survey was done by Mathieu Lefèbvre (2006) in Belgium on the basis of Belgian Household Budget Survey. He also defined 11 composed goods (food, private transport, public transport, clothes, energy, equipment, housing, charges, health, leisure and residual good). Lefèbvre came to the conclusion that consumption expenditures change markedly during the life cycle. Expenditures on health, housing and leisure go up and then they contribute to decreasing spending on household equipment, clothes and transport. Those changes are relatively moderate, but we cannot ignore them, because they cause changes in industrial structure and employment.

Lefèbvre found several interesting results of the survey. Total consumption decreases till 40, and then it starts to increase, till 70, probably in connection with decreasing number of household members. After 70 it starts to decrease, but it does not reach the level of 40. Food has a constant consumption between 25 and 40, and then it slightly increases till 70, after this it decreases. The reason can be an isolation effect – older people have fewer

relatives, visit less people and in connection with it they invite less people. Equipment decreases after 50, health expenditures grow from 55, similarly energy, charges and housing. Transport and clothing sharply decrease after 60.

Housing expenditures grow with age. Then, at the life cycle end individuals live probably in too big flats according to their needs (they lived there before with their family), fees for maintenance of living then also grow. Spending on heating and energy grows significantly with age (too big house for one person). Besides that an element of isolation plays its role there. People stay at home more often because of health degradation and decreasing autonomy, and so they need heat and light.

Other expenditures (on housing, charges, health, leisure time, energy) also increase with age. Especially expenditures on health related purposes increase quickly. The reason is a supply effect (new products, services and methods for medical treatment), more health problems coming with age, but also a cultural factor that makes people to visit a doctor more and more often, and consult with more doctors than previous generations did.

Leisure contains a contradiction: older people reduce their leisure activities in the moment when they have more free time to enjoy them. Decreasing demand is seemed at transport: private transport is connected with the diminution of movability and with the change when in productive age a family can have two cars, going to retirement, one car is enough. Public transport has a similar development – spending grows till 50, and then, after 70, it quickly decreases. Clothing expenses decrease with age, especially expenditures connected with work, the need for clothing is not so high in pension.

An interesting item is represented by equipment expenditures. Till 30 young people usually live in tenancy and do not spend a lot for equipment. Then they buy their own housing and expenditures go up. After setting up the living the expenditures go down only for maintenance or substituting the worn equipment. Especially those pensioners, who decided to renew their living shortly before going to retirement expecting the decrease of their future income, face a decrease of those expenditures.

In the Czech Republic there are also several institutions that run a research of older people and their life conditions in connection with expected future development. One of them is VUPSV (Research institute of labour and social matters) that realized a search called "Financial preparation for life under pension" (Slapak, 2010) where the characteristics of pensioners and pre-pensioners are given linked with preparing themselves to going to retirement.

The first step to contended retirement is to have one's own living facilities (a house, a flat, or a room in the community care home). In the Czech Republic there is a specific situation with living given by our traditions and habits. Majority of aged people are closely linked to their living, relatives, neighbours and they are not willing to change the place of living in spite their flats or houses are too big or difficult to maintain or to live in with health problems. This is a continuing tendency coming from national psychology. Czech people traditionally do not want to move far from their home, for instance for work (especially middle and older generations). They are fixed to place of living, family, friends, and neighbourhood. This fixation to place of living leads then to the need to take goods and services in their home space (including nursing or other forms of care). The fixation tendency is probably strengthened by inefficient real estate market.

We have a relatively big part of households owing regular living and also holiday living. They divide into several groups: the first group, this are those people who run holiday living further, usually together with other members of their family, so expenditures are shared. The second group decides to sell holiday living because of high additional expenditures. The third group moves to holiday homes for majority of a year and only for some time they are coming back home. And the fourth group even sells their regular living moving to holiday houses for steady stay. Then there are people who own only regular living and they also can sell it and move to some new living, either in old people's home or in community care home or they live together with children. Such decisions are made usually before or shortly after going to retirement. All those possibilities can affect the future demand as a precondition.

According to VUPSV (Nesporova et al., 2008) the survey in pre-pension group of respondents shows that pre-pensioners can be divided into two groups: those who prepare themselves for retirement and those who do not. Those who do not prepare themselves for retirement do not have free financial sources for unexpected expenditures; they support financially their adult "children" and their families and they totally rely on the state pension pay-as-you-go system.

Those who prepare themselves for retirement, create sufficient financial reserves, buy or rebuild their own living, keep healthy life style and look for possible job opportunities (57 % retired men and 47 % retired women are willing to work in retirement; the main reason is a too small pension). People expect they will have higher expenditures on medicaments, healthcare, food, and costs of living services. Because of lower incomes they intend to spend less or not to spend at all on education, leisure time, holidays, clothing, household equipment, computers and mobile phones.

In the Czech Republic people have the feeling that their living conditions will worsen in retirement. It is based on the fact that expenditures of pensioners make 70 – 75 % of costs of economically active people, but average pensions make about 41 % of average income in the society.

During the life cycle the composition of demand for goods and services changes in households according to changes in incomes, tastes, technology, and composition of households and age structure of the population. The consumption of aged people differs from that one of the young. The old not only influence total consumption, but have an impact also on allocating sources to producing various goods and services. The influence can be given by changes in tastes, needs or preferences, but more often it is given by spending power of different age groups. Households of older people above 60 have usually lower spending power than younger people. The reason can be fewer sources than pensioners expected, lack of forward-looking behaviour, a substitution effect between consumption and increasing leisure time, decreasing expenditures connected with stopped or decreasing working activity and better shopping thanks to changed preferences and bigger amount of free time of pensioners.

Consumption in different periods of life cycle changes, but it does not need to mean decreasing consumption. What is changing – mainly the structure of consumption.

#### Methodological problems of surveys

It is usually very difficult to obtain data about particular households' behaviour from the whole economy. There are some surveys available in our country, as for instance Statistics on Income and Living Conditions done by the Czech Statistical Office. As for finding relevant data for

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defining the trends in households' demands it is necessary to take a sample of households of given characteristics, for instance – the age. Ageing population changes the age structure of population, and characteristics of households, too. The weights of individual characteristics change during the time, and so it is impossible to aggregate simply microeconomic demands.

Then we have to find how to define a particular group of households under interest and to formulate principal questions of: what are the principal factors influencing the demand. Is it age itself? Is it the change in tastes or incomes? Is it the change in income elasticity of demand for particular goods? Is it the changing composition of households respectively decreasing of their size? What is the impact of intergeneration distribution (especially in pay-as-you-go system)? Is the demand influenced by supply (new technologies, new products, and new marketing practices)? What are other factors influencing demand in a given period of time and what is the role of ageing among them? Is the life-cycle hypothesis valid for such demand?

One of crucial problems of further surveys is how to obtain panel data with sufficient informative value. It would be the best to have an extensive sample of households followed in a long period of time, so as to catch changes in demand connected with ageing. This is practically impossible, and so, it is necessary to make surveys in particular periods of time always with a different sample of households holding the same criteria. Then time series of cross-sectional data can be obtained on the basis of particular cohorts of households, chosen according to various criteria, for instance to age and education, with the aim to obtain data affected by the age. In spite defining cohorts would be done always in given period of time, the cohorts being different in each step of survey, living in different economic, social and institutional environment and coexisting with other generations in the same time, we can obtain data sufficient for the sake of such survey. Even having different cohorts can enable us to disentangle from life cycle effect. Then we can make some consumption projections based on demographic factors to predict expected demand given by changing age structure of population.

As a key value influencing the consumption of households we can take the disposable income as an indicator of household environment.

In the short or medium period of time it can be problematic to take into account some specific goods, as houses or cars, where the connection between sources available in this period and demand cannot correspond. We cannot look at the form of household, some income differences, the situation on labour market etc. It could be interesting to take into account a change of consumer preferences based on fashion and other factors, and some socioeconomic variables.

Such method can overcome the problems that could bring panel data. On cohort data we can obtain a new sample each year, so we can hold representativeness of obtained data and avoid bias of measuring errors, as we would work with the average of a cohort. Besides that having other groups of households we can find some movements in demand among them and compare the consumption patterns in time.

#### Ageing in the Czech Republic

The Czech Republic also faces the problem of ageing. According to the Statistics on Income and Living Conditions, Year 2010, in the Czech Republic there are 4 149 665 households with 10 402 836 members, including 1 357 238

households of pensioners (32.7 %) with 2 396 166 members (23.0 %). According to CZSO (Projection, 2003) in 1997, a number of people 60+ exceeded a number of children 0 – 15 and it will grow further. The generation 60+ grows also more quickly than people 15 – 59 and besides that we can see further ageing within senior population. Prognosis till 2050 says that in 2006 people 60 – 69 made 50 % of seniors; in 2050 it will be 38 %. There will be both absolute and relative growth of people 70 – 79 for 96 % till 2050 and people 80+ for 175 % in the same period.

In this prognosis the seniority index (persons 60+ / persons 0 – 15) undergoes a dynamic development: in 1991 it was 84.4; in 2008 it was 140.1; and in 2050 it is assumed to be 311.2 which means that to each child 0 – 15 we will have more than 3 seniors.

The share of older people will increase and the share of young people including people in productive age will decrease. Today, in the CR there are more than 2 million pensioners with 10 123 CZK of average pension, so they can spend more than 20 000 000 CZK monthly, in spite the biggest part of their spending are living costs (30 %) and food (23 %). Among pensioners there are many of them with sufficient financial sources who do not use money for supporting their families, realize an active life and so they are ready to spend remarkable sums of money for consumer goods and services which can create good profit opportunities for business.

This represents a big spending power and being stimulated, also an important market segment and then a factor of economic growth, not only a social burden, as it is sometimes treated.

But on the other hand, in the CR, there is a kind of conflict between the old and the young. Comparing that with the situation in some non European countries, for instance Japan, we can conclude that the society is not able to treat old people as in Asian countries. In Europe, respectively in the Czech Republic there is a lack of mutual respect and even media contribute to this conflict.

And even more of it. The problem with age starts much earlier than after 65. The unemployment between 55 and 64 reaches 47 %. Firms prefer younger applicants for jobs and release older people more readily. It is very difficult then to find another job opportunity. On the other hand, the rate of unemployment among people 15 – 30 is very high (about 24 %), and there is a lack of employment programmes for those groups of people.

Prolonging the pension age and the presence of older people on labour market can even sharpen intergeneration relations. An idea of the second career is not disseminated very often. Nevertheless only 10 % people in pre-pension age want to go to retirement after reaching pension age. There is then a difference between interests of firms and employers in spite of the "optimism" of the Prime minister who said that because of the lack of young workers on labour market firms will have to engage older people.

#### **New consumer group on the market**

The result of ageing population seen on the market is that a group of older consumers is steadily growing. Not taking the differences within this group we can say that production and trade should reflect this coming change as the source of future profits. Not speaking about pension system, taxation, and public expenditures, we focus on spending of pensioners' households (in spite their income possibilities depend on above mentioned factors). We can say the state

is still not well prepared to population age structure changes, but it seems business is not prepared to these at all, in spite these changes create remarkable profit opportunities because of market niches of various kind.

We can expect that there will be demand for new goods and services given by innovations, similarly as at other groups of consumers. Then there will be demand for standard goods and services adapted to older people (for instance simplified technical equipment). And at last there will be demand for specific goods and services answering specific needs of older people.

All those groups of goods and services can be offered at various levels of prices from simple, cheap (and so available for the poorer) goods and services, to luxury ones for those whose financial sources are high.

We can expect especially growing demand for health supporting goods and services, it means medicaments, vitamins and other supporting preparations, physical training aids, personal services. All this can significantly contribute to decreasing sources in healthcare system and create many job places and profit chances.

According to income development we can expect growing spending on leisure goods and services, education, trips and wellness programmes and maybe also on cultural events. The demand for those goods and services is age determined, so schools, hotels, spa, fit centres and other institutions should face specific needs of elderly people with lower noise, healthier menu, more serious programmes offer, higher security and lower physical demanding.

A very specific field of interest of seniors is education and training. Especially of those people who want to increase quality of their life during retirement. Education of seniors has many positive effects. It increases communication skills of older people, increases their self-respect, self-confidence, and independence. It helps them to find new friends and partners, and makes them care for themselves. Seniors who attend courses of lifelong education can develop their knowledge in many fields, widen their interests, they are able to take part in various social and public activities, they can master new technologies, care for themselves and they can better communicate with authorities, other people and the family. They are open to changes, more flexible and happy to have a new meaning of life.

#### **The impact of age determined demand on other characteristics of the economy**

We can observe many effects of ageing population on the economy. Among them, very important economic consequences emerge in:

**Savings:** ageing population going to retirement stops to save money and starts to support themselves from their previous reserves. Decreasing share of people in productive age also can lead to decreasing savings. So, ageing population can influence savings, investment, and then the stock of capital on capital markets.

**Social security system:** the sustainability of social security system depends on the extent in which elderly people are supported from public sources. There is a big uncertainty concerning future development of demand for public sources, but it is obvious that some expenditure linked to ageing population will grow up. This fact needs a change in tax and pension system.

**Economic growth:** economy drawn by external demand depends strongly on foreign economic development.

Domestic demand (especially households' demand) as an important growth factor should be supported by measures taken in wage and pension policy. The demand of aged people is not only the impulse for changing supply, but also a remarkable source of economic growth especially through emerging "new" needs that call for extending job places in some fields of economy. Pensioners having sufficient income and financial reserves can create a synergic effect with other growth factors.

#### Structural changes and changes on labour market

The change in old people households' consumption is likely to lead to changes in some industries (especially personal goods and services, specific goods, health care, housing, etc.) and this will need consequent changes in labour force (professional mobility, retraining, movement among industries). Older people preferring home care and consumption need nurses, paid companions, trainers, helpers, assistants, but neither education system nor training are prepared for such change in demand for labour force. Technological development bringing more and more sophisticated equipment to households will need many technical helpers who will be able not only to put equipment into service, maintain or repair it, but also to provide training of older people how to use it.

The increasing demand for leisure time activities will also need people able to take care of seniors during trips, holidays, educational, hobby, and creative activities.

Not only young people are looking for "starting" living, but also many seniors have a need to rent or buy a smaller flat or house with specific qualities responding to their health state, life style and needs.

These changes being insufficient it would be problematic to adapt the production of goods and services to changes in population composition. Those changes in production, industries, and on labour market will probably cause further follow-up changes in the economy.

#### Conclusion

Ageing population is a topical issue of today's society. It is an inevitable process bringing some problems, but manageable if adequate measures are taken in public policy and in business.

The seniors' quality of life can be improved by providing activities that enable them active, healthy and creative life. This can contribute to their better life shape, to new opportunities on labour market, and finally to decreasing costs of healthcare.

These activities can be provided not only by firms, but also by local authorities, non-profit organizations, clubs or seniors themselves. There is a possibility to develop 3<sup>rd</sup> age universities in lifelong learning, senior clubs, sport, recreation and tourist activities, wellness and spa programmes, domestic or abroad trips or holiday stays, and such programmes can be financed partly by seniors, partly by the state and business, and even by EU funds.

The composition of elderly people consumption change and this fact can be treated either as a problem or as a challenge. Treating it as a challenge we can find new areas of economic activity promising future profits.

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