MENAGEMENT IN HEALTH CARE PRACTICE A Handbook for Teachers, Researchers and Health Professionals	
Title	**ECONOMIC ASSESSMENT AND MANAGEMENT OF PROCESS OF AGEING IN BULGARIA**
Module: 2.8	**ECTS (suggested): 0.5**
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Keywords	Economics, assessment, management, ageing
Learning objectives	After completing this module students and public health professionals should: • know the definition and characteristics of demographic ageing and its economic consequences; • be familiar with some approaches of economic assessment of ageing; • be familiar with ageing and employment policies.
Abstract	Demographic, social and economic status of Bulgarian third age population is one of the less favourable among the EU member states. Population in Bulgaria decreased from 8 948 649 in 1985 to 7 640 000 in 2007 with stable reduction of growing generation, standstill of at-labour-age persons and increase of the above-labour-age population. Major problem is the low employment level of ageing population, unsatisfactory health care services and unsupportive pensioning system. Elder people find themselves in completely new economic and social situation, which together with the usual changes create complexes of vulnerability, inability to manage daily tasks and health problems. The training aims at improvement of the competencies of students, professionals and aged people, their skills to manage the economic reality, enhance their health culture and diminish their exposure to diseases.
Teaching methods	Teaching methods: lectures, exercises, round table discussions, seminars. The training will be ended with an individual thesis on a problem of ageing.
Specific recommendations for teachers	Proportions within work under teacher supervision - 75%; individual students' work – 25%.
Assessment of Students	Case problem presentations.

ECONOMIC ASSESSMENT AND MANAGEMENT OF PROCESS OF AGEING IN BULGARIA

Jasmine Pavlova

THEORETICAL BACKGROUND

Introduction

Seventeen years ago in the Republic of Bulgaria has started an accession from centralized planning to market oriented economy and one year yet Bulgaria is a full member of the European Union. The current Bulgarian economy can be described following some specific operational market relations: completed structural changes, achieved macroeconomic stability, availability of market institutions in all spheres of the public life. The consequences of these changes have substantial economic and social dimensions.

The beginning of twenty-first century was marked with successes and difficulties for the Bulgarian society. The basis laid in the end of the last century develops at a good pace (during the last 3-4 years Bulgaria rated about 6% growth of the gross domestic product (GDP)). According to the official data, the unemployment dropped to 6-7%, but yet its distribution by regions remained still uneven. The country is affiliate of the European Union one year yet. In order to let Bulgarians feel themselves Europeans not only *de jure*, but also *de facto,* it is necessary to follow a sustainable overtaking development of the economy, which by the means of the figures means maintenance of not less than 6-7% of GDP for about 20 year. The condition of the population, though, provokes serious anxiety and raises multiple problems to be solved.

Bulgaria is not an exception from the other European countries when comparing the *negative phenomena* in the demographic development of the population. In distinction to them, these tendencies are much more extreme and of much stronger impact to the social systems.

Therefore it was considered that training of students, health and social professionals as well as aged people in managing the new economic and social life realities, and acquaintance with the natural psychosomatic changes of age advancing is of urgent importance.

Corresponding to training targets and problematic areas, the following programme themes were selected:

- Information on specific diseases of third age;
- Possibilities for protection and reduction of disease complications;
- Stressogenic factors in the third age;
- Motor regime and healthy nutrition;
- Adaptation of behaviour based on the living and social experience;
- Demographic ageing and economic consequences;
- Retirement, pensioning systems. European experience;
- Application of market approaches for improvement of the third age people's living standard;
- Basic knowledge in information and computer technologies.

Demographic aging in Bulgaria

Bulgaria is not an exception from the other European countries when it concerns the processes of demographic development of the population. Differing from the other EU countries, processes here are much more extreme and with much higher impact on the social systems.

The study of population goes back quite a long way. After the Liberation in 1878 the Third Bulgarian State was established and the interest to the population increased due to the necessity of statistical data, labour force and overall development of the new country. Factors and reasons, determining the growth of the population in Bulgaria, are complex: biological, social, economic, ethic and others.

In 1880 according to the census of the population in Bulgarian Principality there were 2007919 people and in 1884 in Eastern Rumelia there were 942680. After the Union of Eastern Rumelia with the Bulgarian Principality in 1885 the population exceeded 3 millions.

The peak of the growth of Bulgarian population was in 1985 when it reaches nearly 9 millions people. After this it begins to decrease due to many factors. Analyzing the data of Table 1 we can mention some important tendencies: decreasing of total population and people under labour age and increasing of townspeople and aged and old population in the country. The migration from villages to towns is a global process in European countries and Bulgaria is not an exception. Towns offer jobs and higher standard of life that is why they attract many people, mostly young generations. Gradually villages become depopulated, the agriculture falls into a crisis because of the lack of young labour force (1,2,3,4).

Table 1. Demographic status of Bulgarian population

Years of census	Total population	Percentage of townspeople	Percentage of people below labour age	Percentage of people in labour age	Percentage of people over labour age
1887	3154375	18.8	-	-	-
1890	3310713	19.7	-	-	-
1900	3744283	19.8	42.9	47.3	9.8
1920	4846971	19.9	38.8	51.2	10.0
1934	6077939	21.4	37.4	53.2	9.4
1946	7029349	24.7	29.8	58.6	11.7
1965	8227866	46.5	25.7	58.2	16.1
1985	8948649	64.8	22.9	56.0	21.1
2000	8149468	69.0	16.8	58.3	24.9
2006	7679290	70.6	14.6	62.8	22.6
2025*	6125400	-	12.2	60.2	27.6

Sources: NSI - 2007, UN, Population Division, DESA, According to prognosis data

The ageing of population is seen as one of the major challenges to the Bulgarian society and economy. In the beginning of 20-th century people under labour age were 42.9%, those over labour age were 9.8%. The birth-rate was 42.2‰, the general mortality rate – 22.5‰, the children mortality - 200‰. The natality in Bulgaria was high till 1926

and it determined the high level of natural growth. The country has a model of "Young population" for a period of nearly fifty years. After 1926 the decrease of natality changes constantly the demographic structure of the population. The changes in correlations between groups of people over and under labour age show that the demographic ageing of the population begins about 1910-1920. This tendency was manifested continuously until 1965, when the relative share of old people was 16.1. Bulgaria converts into the group of countries with demographic model "old population". The last year's data show decreasing of natality and increasing of mortality.

The natural growth is negative. It is the greatest demographic fall in Bulgaria except periods of Balkan and First World Wars. These processes intensify the deformations in age structure of the population and decrease the life and labour potential of the country.

Bulgaria relatively quickly passes the four stages of the demographic transition. The first period until 1924 is characterized with high levels of natality and mortality. The generations change each other very rapidly. The middle duration of life was 42-45 years (1900-1905)! The second period comprehends years 1924-1939. The natural growth of the population was reduced considerably, more than twice (Table 2).

Table 2. Natality, mortality and natural growth rates

Years	**Natality ‰**	**Mortality ‰**	**Infant mortality ‰**	**Natural growth ‰**
1900	42.2	22.5	-	19.7
1920	39.9	21.4	-	18.5
1940	22.2	13.4	-	8.8
1960	17.8	8.1	-	9.7
1980	14.5	11.1	-	3.4
1990	12.1	12.5	14.8	-0.4
2000	9.0	14.1	13.3	-5.1
2006	9.6	14.7	9.7	-5.1

Source: NSI 2007

This stage was interrupted by the Second World War. The natality was 22‰, the mortality - 13‰. After 1950 the second stage of the demographic transition continued till the middle of the 60s when the natality reached 15‰, the mortality – 8‰ and the natural growth - 7‰. The third stage of the demographic transition begins in the end of the seventh and the first half of the eighth decade. In 1985 the natality reached 13.3‰, the mortality – 12‰, the natural growth – 1.3‰. In the end of this period the net-coefficient for reproduction of the population decreases less than 1. This is a sign for the beginning of the fourth stage of the demographic transition: the indexes of natality and mortality approximated and the natural growth of the population in 1990 was – 0.4‰ already.

We have to note that this transition proceeded at accelerated rates in Bulgaria, during 50-60 years, while this process continued more than a century in European countries. From the beginning of 1990 Bulgaria felt in a condition of depopulation. The average life expectancy had increased from 51.75 years (male – 50.98; female – 52.56) in 1935-1939 to 72.60 years (male – 69.10; female – 76, 30) (1,4,5).

Very often the notion "old population" is connected to long-life of the nation. The publication of statistic for long-livers in Bulgaria creates an idea that the country is a one with old population. But the demographic ageing is not identical with the category "long-life". It measures the bio-social stability of the population in certain groups. The phenomenon "long-life" is typical for nations with "young population" model and inversely, there are a few long-livers in regions with old population. According to the

classic rule higher longevity is observed in countries and regions with high percentage of old people. We couldn't confirm this. In Bulgaria in regions with old population the number of long-livers is considerably smaller than this one in regions with younger population. In the case of Bulgaria there is a direct correlation between the number of long-livers and the high birth-rate. Such are districts of Smolian, Kardjali and Blagoevgrad (St. Vizev, A. Hadjihristev).

The correlation between sexes is: from 961 female/1000 male (1900) to 1051 female/1000 male (2000). According to the UN prognoses in 2025 the inequity will increase: 1095 female/1000 male. In a large part, the greater number of women is due to the higher mortality and higher migration among men.

In the past the age structure of Bulgarian population was progressive, that is to say the age pyramid was with a large foundation and little by little narrowed, increasing the age. Later the basis of the pyramid was equal to the middle part. Nowadays the deformation continues as it is shown in the figure 1 (Age pyramid of Bulgarian population 1990-2020). The age structure of the Bulgarian population is of regressive type, which is also influenced by the emigration of young people mainly. The foundation of the pyramid narrows, on contrary its middle and upper part extend (4,6).

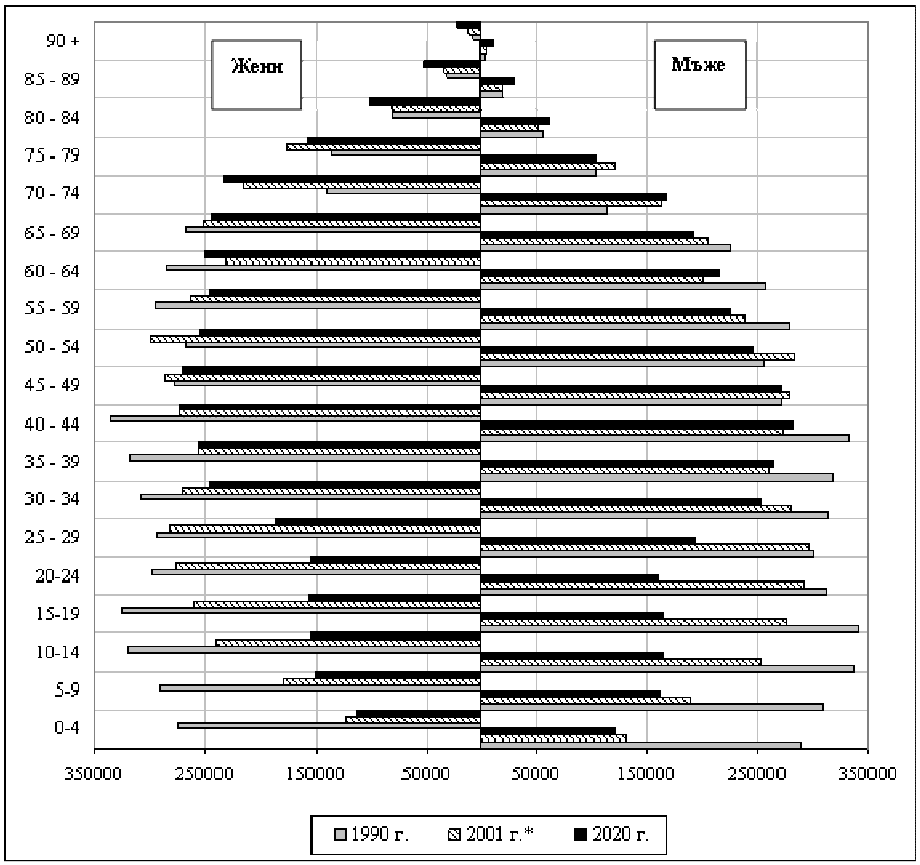
Development of the Bulgarian economy after 1990

The period 1990-1997 is specified with a transition from *planned and centralized* to *market* economy, where the basis of the free competition among economic entities is laid , and the prices of goods and services are being defined from the market's demand and offering. This period of transition was hampered by the inherited negatives of the economic, cultural and political life. As a result, and comparing to the other countries of the Eastern Europe, the country slowed down the processes of privatization and reimbursement of lands and, respectively its integration in NATO and the EU.

During the period about 4000 entities were privatized, some 1500 before 1995. A main part of the privatized subjects is municipal property as the state property represents only 600. At the end of 1998 there were 500000 active economic entities from which 9000 were state, 10000 – municipal, and the rest of it – private. Almost 25% of these economic entities were registered in the capital, about 15% in the region of Plovdiv. The latter reflects the regional differences of work occupation which is due to both traditions and local conditions.

During the same period the volume of GDP per capita changed from 943 in 1991 up to 1543 in 1995. During 1998 it dropped down to 1484. Comparison of this criteria shows that GDP in Bulgaria is more than 20 times lower than in Norway, Denmark, Luxemburg or any other developed country. Industrial production also decreases as in 1997 it represents only 55% of 1989's volume. The main fall off concerned branches, strongly dependent on expensive import row materials: machine building, ferrous metallurgy, etc. This decrease continued during the next year as well. Meanwhile, a rapid increase of private owned share in the industry was registered as in 1998 it reached 42.4%. About 20% of the private economy supplementary net value resulted from this sector. At the same time most of enterprises in the sector remained unattractive for potential buyers due to their enormously large debts and unstable markets for realization of the production (4,7,8,9).

Fig. 1. Age pyramid



Source: www.euro.who.int
Legend: Жени – Female; Мъже – Male: г – year

After 1989 started a long and tormenting process for restitution of agricultural lands to their former owners. This led to a decrease of the agricultural production and deficit of food in the country. Restitution was accelerated during the last years and as a result, by 1998, about 80% of the land ownership was restored with muniments covering 23% of the existing agricultural lands. Restitution of land allowed for a fast increase of the private share in the sector of agricultural production up to 95-98% recently. It represents 32.5% from the net added value (NAV) create din the private sector of the economy. Through the development of the private sector of agriculture is attended by lack of financing for machinery, fertilizers and chemicals. This resulted in decrease of plant growing average yield, changes of its structure into an increase and prevailing of the share of commercially demanded products such as vegetables, potatoes, grain and other sub-branches products.

At the end of the day, the deep and long economic crisis in Bulgaria imposes the necessity for implementation of a strict financial discipline regime, e.g. of *a currency board.* Economy crisis, corruption and legislative uncertainty were obstacle for potential foreign investors. The lack of such investments slowed the development of the country and limited the real income of the population.

Table 3. Macro economic indicators for Bulgaria 1999 - 2008

Indicator	Measure	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008 *
Real growth of GDP	% rate	2.3	5.4	4.1	4.5	5.0	6.6	6.2	6.1	6.2	6.2
GDP per capita (per PPS)	EC25= 100	25.8	26.6	28.0	29.8	31.3	32.3	33.8	35.7	38.2	40.6
Labour efficiency ratio	EC25= 100	29.2	29.0	30.0	31.6	32.0	32.1	32.8	34.0	36.1	38.0
Industrial production (real growth from previous year)	%	-6.3	10.6	4.1	4.7	14.1	17.7	6.7	7.7	11.0	9.5
Investments in fixed capital (real growth from previous year)	%	20.8	15.4	23.3	8.5	13.9	13.5	23.3	17.6	24.6	17.0
Average annual inflation	%	2.6	10.3	7.4	5.8	2.3	6.1	5.0	7.3	7.4	5.2
Level of unemployment	%	13.8	18.1	17.3	16.3	13.5	12.2	10.7	9.1	7.3	6.5
Budgetary deficit	% GDP	0.2	-0.6	-0.6	-0.6	0.0	2.2	1.9	3.3	3.0	2.0
Export of goods	Mln. Euro	3734	5253	5714	6063	6668	7985	9466	12012	14619	17396
Import of goods	Mln. Euro	4741	6533	7493	7941	9094	10938	13876	17574	20760	23874
Current account	% GDP	-4.8	-5.6	-5.6	-2.4	-5.5	-6.6	-12.0	-15.7	-17.6	-16.8
DFI	% GDP	7.1	8.1	5.9	5.9	10.5	13.8	14.2	17.4	15.0	13.0
Net external debt	% GDP	89.2	86.9	78.6	65.0	60.1	63.8	69.0	80.1	86.0	89.5
Average currency rate	BGN/EUR	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96
Note: *) prognostic data											

Source: Bank Austria Creditanstaalt, BNB, NSI, EAPA, November 2007

Tourism decreased its development until 1997-1998, which is a logical explanation taking into account the crisis from that period. Though, since 2000 a sustainable tendency of ascending improvement was recorded. Since then over 5.5 million foreigners visit Bulgaria, about 2 million transit the country and more than 4 million Bulgarians travel abroad.

Bulgarian economy develops sustainable since 1997. During the last years the GDP growth is within the margins of 6.2 – 6.3%. There is an increase of the capacities utilization in the industrial and construction sectors. In 2006 an increase of the added value in the agrarian sector at the rate of 0.9% compared to the previous year was registered. Labour occupation of the active population increases as there are sectors were there is a shortage of manpower. Labour market item will be further discussed in a separate chapter (7,10,11). The external trade balance of Bulgaria is negative for years. Nevertheless it is quite encouraging that the increase of export rates is higher than those of import (Table 3).

Main factor for increase of the real income during the last years is the expanding of the economic liberty. It is related to the implementation of the currency board, ensuring relative stability of the Bulgarian lev, as well as the privatizing of most of the state enterprises, liberalization of some of the branches and removal of barriers before the new participants on the market, reduction of obstacles in external commerce like decrease of duties and tariff limitations. All these improve the potential for long-term growth as the goal is to encourage the individual initiative and personal responsibility. Due to a strong dependency on natural conditions, climate change and lower sustainability of the sorts, a drop down of agricultural production was recorded during 2007. the logical expectations for this year is that yield will be insufficient again this year and according to the official data the net added value (NAV) from the agricultural sector will drop down with 43% real expression. Notwithstanding that the share of this sector in the total added value becomes lower and lower, such a sharp decrease leads to slow down of the general growth. Increased subsidies from European funds do not yet have results. This will effect in more expectations for state support as part of the funding will be targeted only for maintenance of the land and not for cultivation instead of effective production and generation of profits. Therefore no high improvements are to be expected during the next years and dependency on climatic conditions will become deeper and deeper (7,8,12).

Situation in the other sectors looks more positive. The real growth of the NAV in the industry reaches 10.5%, and 9.7% for the services (2007). Relatively lower remain the correctives, which include net taxes on products and indirectly measured services of the financial brokers.

Concerning expenditures, a slight tendency for increase of the GDP share in the investments, measured through gross conversion into fixed capital. It reaches 35.3% on annual basis. This is a precondition for increase of the potential economic growth in near future. On another hand the gross savings in economy decrease up to 15% annual basis, though the share of end consumption in the GDP decreases. This is a result from lower net current transfers and lower net income. The reasons could be found in the increased volume of foreign investments in the country, which are due to interest fees and increasing dividends. From another part, the increased income in the country and the immigration of whole families abroad, leads to smaller foreign transfers (8,9,11).

As a whole, data for gross domestic product development are positive. Certain delay of the economic development is due to the ineffective agriculture.

Most probably the emerging of new actors on the market, for example the funds for agricultural lands, would result in land consolidation, and consequently – to long term opportunities for generation of profits. It might be expected, though, that upcoming subsidies would distort farmers' incentives and decline their attention from increasing of the efficiency to drafting of applications with unclear final results.

Subsidies for agricultural sector shall come from the European budget in total and moneys from Bulgarian taxpayers shall be reduced to minimum. Another negative factor for the development of the economy is the hidden economy, which by its nature represents quite a complex social-economic phenomenon. Practically it concerns all public-economical structures on international, national and regional level. Following the expert evaluations the relative share of the hidden economy amounts at 10-12% of the world' GDP (making such evaluation is very difficult and it is conditional in some sense) (Table 4). For Bulgaria this "product" varies between 20 and 25%. Problems, causing this phenomenon, are multiple: payment of labour becomes non-monitored and undeclared income for both employee and employers; production from it is not taxed (added value tax, income tax, etc.); hidden economy operates with two very serious tools: smuggling and drug-traffic (5,9).

From the variety of scenarios concerning the economic future of Central and Eastern European countries for the period until 2020 and 2050, according to some economy experts from Bulgarian Academy of Science, Bulgaria can chose two extreme versions for development :

- Slow down of the development with about 2% average annual rate of the GDP growth or slow development with about 3% average annual rate. This means that following the first scenario by the middle of the century we will have 30-35% GDP per capita from the EC-15 average level by that time or 40-45% following the second scenario. Such projections mean that will cause to Bulgaria social-economic stagnation with heavy strategic consequences (Table 5).
- Overtaking or quick overtaking economic development with 5.0-6.0% average annual rate of the GDP growth. In order to realize economic overtaking it is necessary to have an annual growth 2.5-3.0 times higher than the growth of the countries in EC-15. In this case we will reach 50-55% GDP up to 2020, and 75-80% of the growth of EC-15 by 2050. Such favourable prospective for Bulgaria is possible, but not sure (7,10,12).

Table 4. Real GDP growth rate 1998 – 2009

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU (27 countries)	2.9	3.0	3.9	2.0	1.2	1.3	2.5	1.8	3.0	2.9 (f)	2.4 (f)	2.4 (f)
EU (25 countries)	3.0	3.0	3.9	2.0	1.2	1.3	2.4	1.8	3.0	2.9 (f)	2.4 (f)	2.4 (f)
EU (15 countries)	2.9	3.0	3.8	1.9	1.1	1.2	2.3	1.6	2.8	2.7 (f)	2.2 (f)	2.2 (f)
Belgium	1.7	3.4	3.7	0.8	1.5	1.0	3.0	1.7	2.8	2.7 (f)	2.1 (f)	2.2 (f)
Bulgaria	4.0	2.3	5.4	4.1	4.5	5.0	6.6	6.2	6.1	6.3 (f)	6.0 (f)	6.2 (f)
Czech Republic	-0.8	1.3	3.6	2.5	1.9	3.6	4.5	6.4	6.4	5.8 (f)	5.0 (f)	4.9 (f)
Denmark	2.2	2.6	3.5	0.7	0.5	0.4	2.1	3.1	3.5	1.9 (f)	1.3 (f)	1.4 (f)
Germany	2.0	2.0	3.2	1.2	0.0	-0.2	1.1	0.8	2.9	2.5 (f)	2.1 (f)	2.2 (f)
Estonia	4.4	0.3	10.8	7.7	8.0	7.2	8.3	10.2	11.2	7.8 (f)	6.4 (f)	6.2 (f)
Ireland	8.0	10.4	9.4	6.1	6.6	4.5	4.4	6.0	5.7	4.9 (f)	3.5 (f)	3.8 (f)
Greece	3.4	3.4	4.5	5.1	3.8	4.8	4.7	3.7	4.3	4.1 (f)	3.8 (f)	3.7 (f)
Spain	4.5	4.7	5.0	3.6	2.7	3.1	3.3	3.6	3.9	3.8 (f)	3.0 (f)	2.3 (f)
France	3.5	3.3	3.9	1.9	1.0	1.1	2.5	1.7	2.0	1.9 (f)	2.0 (f)	1.8 (f)
Italy	1.4	1.9	3.6	1.8	0.3	0.0	1.2	0.1	1.9	1.9 (f)	1.4 (f)	1.6 (f)
Cyprus	5.0	4.8	5.0	4.0	2.1	1.9	4.2	3.9	4.0	3.8 (f)	3.9 (f)	3.9 (f)
Latvia	4.7	3.3	6.9	8.0	6.5	7.2	8.7	10.6	11.9	10.5 (f)	7.2 (f)	6.2 (f)
Lithuania	7.5	-1.5	4.1	6.6	6.9	10.3	7.3	7.9	7.7	8.5 (f)	7.5 (f)	6.3 (f)
Luxembourg	6.5	8.4	8.4	2.5	4.1	2.1	4.9	5.0	6.1	5.2 (f)	4.7 (f)	4.5 (f)
Hungary	4.9	4.2	5.2	4.1	4.4	4.2	4.8	4.1	3.9	2.0 (f)	2.6 (f)	3.4 (f)
Malta	:	:	:	-1.6	2.6	-0.3	0.2	3.3	3.4	3.1 (f)	2.8 (f)	2.9 (f)
Netherlands	3.9	4.7	3.9	1.9	0.1	0.3	2.2	1.5	3.0	2.7 (f)	2.6 (f)	2.5 (f)
Austria	3.6	3.3	3.4	0.8	0.9	1.2	2.3	2.0	3.3	3.3 (f)	2.7 (f)	2.4 (f)
Poland	5.0	4.5	4.3	1.2	1.4	3.9	5.3	3.6	6.1	6.5 (f)	5.6 (f)	5.2 (f)
Portugal	4.9	3.8	3.9	2.0	0.8	-0.8	1.5	0.7	1.2	1.8 (f)	2.0 (f)	2.1 (f)
Romania	:	-1.2	2.1	5.7	5.1	5.2	8.5	4.2	7.9	6.0 (f)	5.9 (f)	5.8 (f)
Slovenia	3.9	5.4	4.1	3.1	3.7	2.8	4.4	4.1	5.7	6.0 (f)	4.6 (f)	4.0 (f)
Slovakia	4.4	0.0	1.4	3.4	4.8	4.8	5.2	6.6	8.5	8.7 (f)	7.0 (f)	6.2 (f)
Finland	5.2	3.9	5.0	2.6	1.6	1.8	3.7	2.9	5.0	4.3 (f)	3.4 (f)	2.8 (f)
Sweden	3.8	4.6	4.4	1.1	2.4	1.9	4.1	3.3	4.1	3.4 (f)	3.1 (f)	2.4 (f)
United Kingdom	3.4	3.0	3.8	2.4	2.1	2.8	3.3	1.8	2.9	3.1 (f)	2.2 (f)	2.5 (f)

Source: eurostat –www. ec. europa.eu/eurostat

Labour Market in Bulgaria

Following the results of a research on the manpower, implemented by the National Statistic Institute during 2006 – 2007, the economically active persons (manpower) in the country were 3408.1 mln. (1805.9 were men and 1602.2 women). The relative share is 51.3%, respectively 56.8% men and 46.4% for women. The economical activity coefficient for the age group of 15-64 is 64.9%, respectively 69.4% for men and 60.5% for women.

The share of the employed population in cities, which are at age of 15 and older (52.4%) is with 17.7 grades higher than the one in villages (34.7%).

From total number of employed population, 121900 (3.9%) are employers, 218800 (7.0%) - self-employed, 2762300 (88.1%) are employees, and 32400 (1.0%) – no paid family workers. 840600 or 30.4% of the total number employed people work in the public sector, and 1921700 or 69.6% - in the private sector (3,9).

Table 5. GDP per capita in PPS 1997 - 2008

	1997	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
EU (27 countries)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0 (f)	100.0 (f)
EU (25 countries)	104.9	105.0	105.0	105.0	104.8	104.6	104.4	104.2	104.1	103.9	103.9 (f)	103.8 (f)
EU (15 countries)	115.5	115.4	115.3	115.2	114.8	114.2	113.7	113.1	112.7	112.1	111.7 (f)	111.3 (f)
Belgium	126.1	123.3	123.4	126.4	124.0	125.5	123.5	121.2 (b)	121.3	120.0	123.5 (f)	122.4 (f)
Bulgaria	26.5 (e)	27.0 (e)	27.0	27.9	29.4	31.1	32.6	33.9	35.4	36.7	38.7 (f)	40.1 (f)
Czech Republic	73.2 (e)	70.7 (e)	69.8	68.7	70.5	70.7	73.7	75.4	76.7	78.8	81.9 (f)	83.3 (f)
Denmark	133.7	132.4	131.3	132.1	128.4	128.9	124.7	125.6	127.2	126.1	125.9 (f)	123.5 (f)
Germany	124.8	122.8	122.6	118.9	117.1	115.6	117.0	116.8	115.3	114.4	114.1 (f)	113.3 (f)
Estonia	41.2 (e)	42.3 (e)	41.6	44.8	46.3	50.0	54.6	56.8	63.0	68.5	71.7 (f)	74.2 (f)
Ireland	115.3	121.8	126.7	131.2	133.0	138.5	141.1	142.1	144.0	145.7	143.7 (f)	143.0 (f)
Greece	84.9	83.6	83.1	84.4	87.5	91.1	92.4	94.0	96.5	97.8 (f)	98.3 (f)	98.9 (f)
Spain	93.6	95.7	96.7	97.7	98.5	100.9	101.4	101.4	103.1	105.2	102.5 (f)	101.3 (f)
France	115.1	115.5	115.2	115.8	116.1	116.4	112.3	110.5 (b)	112.1	111.1	111.7 (f)	110.2 (f)
Italy	119.5	120.2	118.0	117.3	118.3	112.4	111.2	107.0	105.0	103.3	102.9 (f)	101.3 (f)
Cyprus	96.5 (e)	98.7 (e)	104.3	94.2	91.3	89.7	89.3	90.7	92.9	92.5	93.6 (f)	92.8 (f)
Latvia	34.7 (e)	35.7 (e)	36.2	36.8	38.9	41.4	43.5	45.8	50.0	54.2	60.6 (f)	63.4 (f)
Lithuania	38.3 (e)	40.3 (e)	38.9	39.4	41.6	44.2	49.1	50.6	53.3	56.3	61.5 (f)	64.4 (f)
Luxembourg	215.4	218.2	238.2	244.7	235.1	241.2	247.6	253.6	264.7	279.7	283.8 (f)	286.4 (f)
Hungary	51.7 (e)	52.9 (e)	53.7	56.3	59.1	61.7	63.5	63.4	64.4	65.0	65.3 (f)	65.3 (f)
Malta	80.8 (e)	80.8	81.3	84.0	78.2	79.9	78.7	77.0	77.5	77.2	76.3 (f)	75.9 (f)
Netherlands	127.5	129.1	131.3	134.8	134.2	133.9	129.9	129.7	131.3	130.8	132.5 (f)	132.1 (f)
Austria	133.0	133.1	133.1	133.7	127.6	127.9	129.0	129.1	129.0	127.8	129.4 (f)	128.7 (f)
Poland	46.9 (e)	48.0 (e)	48.7	48.4	47.7	48.5	49.1	50.8	51.3	52.4	55.1 (f)	56.6 (f)
Portugal	76.4	76.9	78.6	78.3	77.6	77.3	77.0	74.9	75.5	74.6	73.8 (f)	72.9 (f)
Romania	:	:	26.1	26.0	27.6	29.4	31.5	34.1	35.5	38.9 (f)	39.3 (f)	40.6 (f)
Slovenia	75.9 (e)	76.9 (e)	78.7	78.9	79.0	81.3	82.5	85.4	87.0	88.0	91.6 (f)	92.8 (f)
Slovakia	51.5 (e)	52.2 (e)	50.7	50.3	52.5	54.3	55.7	57.3	60.6	63.8	67.5 (f)	70.2 (f)
Finland	111.1	114.8	115.6	117.7	116.2	115.7	113.5	116.8	115.2	117.2	118.2 (f)	118.5 (f)
Sweden	123.9	122.9	125.8	127.2	121.9	121.6	123.2	125.2	123.9	124.8	123.5 (f)	122.9 (f)
United Kingdom	116.6	116.2	116.1	117.3	118.1	118.9	120.0	122.3	119.4	118.2	119.6 (f)	118.4 (f)

Source: eurostat – www. ec.europa.eu/eurostat

In the service sector there are 1800100 (57.4 % of totally employed) people, in industry - 1125500 (35.9%), and in agriculture and forestry – 209000 (6.7%).

Unemployed people in 2007 are 272700 or 8.0% from the economically active population. Workless men are 138500, and unemployed women – 134200. Coefficients of

unemployment per gender are respectively 7.7% for men and 8.4% for women. Unemployment is significantly higher in villages - 13.3% compared to the cities - 6.4%. Unemployed persons at age between 15 - 64 accomplished years are 271300, and the coefficient for unemployment for the same gender group is 8.0%. Unemployed persons at age between 15 - 24 accomplished years are 45700, and the coefficient for youth unemployment is 16.0% (3,9).

The educational status among unemployed persons shows that 8.9% have university degree, 47.0% have accomplished high school, and 44.1% have accomplished primary or lower level school.

Some 151700 or 55.6% of the total number unemployed persons have been workless one or more years as in villages this number reaches 60.6%. Territorial distribution of unemployed persons is unequal. In 10 regions the level of unemployment is lower than the average for the country as lowest it is in Sofia-city (1.66%). the level of unemployment in the rest 18 regions is above the average for the country and its highest levels were recorded in Targovishte region (14.55%).

The average rate of salary increase, but it still cannot be compared to the levels in the other countries EU member states. The average salary in 2007 for the public sector reached Bulgarian lev (BGN), 513 which means 18 per cent nominal growth compared to 2006, when the average working salary was 436 BGN. The number of insured persons is 2 762000, which means an increase of more than 110000 compared to 2006. The average working salary in the sectors for production of food, drinks and tobacco are the highest in the public sector – 1369 BGN with a nominal growth of 43, compared to 2006. Relatively high average working salaries were monitored in the following branches: financial brokerage - 1065 BGN, production of energy carriers – 1100 BGN, etc. The average salary for production of food drinks and tobacco in the private sectors is significantly lower - 365 BGN. Statistics show that the highest average working salary on the territory of the country was recorded in Sofia-city – 562 BGN, the lowest one salary was registered in the regions of Blagoevgrad – 323 BGN and Haskovo – 323 BGN (8).

Monthly income of Bulgarian households in 2007 has increased with 111.3 BGN (20%) compared to 2006. the main source of the incomes is the *working salary*. The volume of all reimbursed *social transfers* (compensations, pensions, grants, family supplements) increased. Maintenance of relatively stable level of the incomes from *family farm* was registered. Incomes from entrepreneurship in 2007 increased with 23.4 % compared to 2006. a tendency for reduction of incomes generated from *real estate sales*. The expenditures structure shows that most significant expenditures were made for food – about 40%, something typical for the countries with low life standard. Consumption of food products is characterized with poor relative share of the fruits and vegetables (2,3,5,9,11). Living standard of Bulgarian population improves but still remains one of the lowest in Europe.

Pensioning system

Significant demographic problems in Bulgaria, emigration of young people, great number of pensioners and the high unemployment rate brought an inevitable necessity of reform in the pensioning system. The way of financing was changed first of all. The tree-pillars pensioning system was implemented and a capital pensioning system was established except for the cost justification system. During 2007 the social pension of age amounted at 68 BGN per moth (the average was 162 and maximal 490 BGN), which represents an increase of 8.5% compared to the previous year. There are 2.270 millions pensioners, and 2.773 millions pensions, because some people receive more than one pension (for example for disability and for their age). The expenditures on pensions during 2007 amount BGN

4.5 billions, which is the largest expenditure item of the National Statistical Institute's budget (3,5).

Reasons for the high pensioning fees are the non-operational economy, poor competition among enterprises, and insufficient collection of the insurance fees as well as the low cost of labour force. But one shall in no way rely on the increase of the fees aiming to fill up public insurance taxation funds. The fee payable by the employees will increase in during next years versus decreasing of the employers fees, but yet, the amount of the salary shall be increased in order to compensate the increased insurance fees. The rate of the insurance fees is determined on annual basis by a specific law being a percentage of the gross labour remuneration. Maximal rate of the insurance income due to insurance payments is 10 minimal labour salaries for the country.

Introduction of additional mandatory pensioning insurance (AMPI) since 2002 does not lead to increase of the total rate of insurance instalments because it is provided for redirecting a part of the public insurance tax to the funds, established by private pensioning insurance associations. Bulgarian employers have some doubts that still higher rates of the mandatory insurance instalments will not allow for the active participation of most of the employers in the process of the additional voluntary pensioning insurance, which, on the other hand, will slow its development. The described past and current financial status of the social insurance system gives certain grounds to assume that even in future the achievement of financial equilibrium will be an extremely difficult task. One of the reasons is the rate of the insurance fee which has almost reached its maximal level already. Even if we assume that we base on the lowest insurance instalment, collected through the rest of the instalments under Professional Qualification and Unemployment Fund (PQUF) and health insurance, it would exceed the insurance fees of countries like Germany (35,2 %), France (49,4 %), and others. If in future balances are still tipped towards the employers, the result will remain definitely negative. Increased social expenditures, part of the common volume of the production costs in high cost industries, will continue to limit the competitiveness of the enterprises on the internal and external market, and respectively their profits. Such industries will aim at reducing of working places and keeping low labour salary level. This is an absolute stimulus for the black labour market. As we can guess, social insurance gains no profits from the enlarging of this market (3,9).

There is a sustainable insufficiency of funds. Current pensioners are the most affected social group because the social insurance system cannot afford an increase of the pensions and keeps their levels suck to the administratively determined ceiling. Alternatives are two: either increase the instalment rates in order to compensate insufficiency, or, increase subsidies, which on its part will lead to misbalance of the state budget, i.e. to budgetary deficit. Yet the increase of the instalments' percentage will come into collision with the employers' indignation only. This is the first barrier, which the social insurance is facing when targeting a relative stability of the system.

If we assume the controversial option – eventual transfer of part of the insurance fees burden to the insured people, this will definitely facilitate employers, but in macro-economical plan it will not reduce the financial load to the active population. The question is, that having in place expenditures distribution system of financing, such as it is in Bulgaria (Pillar I), the increasing number of pensioners leads to growth of the expenditures and a corresponding necessity to increase percentage of insurance fees (3,5,11).

In Bulgaria the pensioning burden on the active population is due to the comparatively low pensioning age threshold. Currently this threshold age is corrected due to the before mentioned reasons. Even though, if the tendency for irregular increase of the pensioner's number compared to the active population's number, it would create serious difficulties for financial equilibrium and social insurance as well. In such situation it is

good to raise one more question – whether the active population will bear this burden, whether the system of solidarity between generations will stand it, i.e. the question is not only economic but also a moral one. Currently economically active population bears the consequences of the crisis and except its own standard it has to guarantee the good life standard of the inactive part of the society. It is claimed that paying insurance fees today means ensuring future guarantees. In our conditions, though, this assertion is not valid. Paying their insurances the active population replenishes the funds from which the pensions of the retired population are paid. Analyzing this vicious circle, it is essential to understand that the limits of the solidarity between generations are strongly dependant on the economic interests of each member of the society and the society as a whole. In conditions of crisis and dependency on external factors the active population can support the preceding generations, which from logical point of view is quite logical. But the working people do not agree to put aside money for insurance because they doubt they would be able to use these "savings" and moreover, they doubt they can count on future generations' solidarity.

Based on the above mentioned findings several fundamental conclusions are due:

- mandatory pension insurance cannot guarantee higher level of the future insurance instalments because the current insurance fee has reached its maximal rate;
- Maintaining insurance instalments within the limits of the bearable is of critical importance for the improvement of the economic conditions, including the increase of the employment and decease of unemployment.

After conclusions comes the turn of the concrete measures which could be undertaken in order to mitigate the negative tendencies. The increase of the threshold age for pensioning and the necessary employment record are a fact already, but taking into account the worsened health status of Bulgarian population it is not considered to be an optimal decision. This measure was applied due to the extremely unfavourable demographic picture. Increasing the threshold of pensioning age up to the one in the other European countries contributes to the balancing of the system, though it has undesirable social response. It is appropriate to refer to decisions of longer sustainability effect, which correspond to the conditions of the market economy. This is the implementation of alternative forms of insurance protection like the second and the third pillars into our insurance system, namely the additional mandatory and additional voluntary pensioning insurance.

According to the third pillar, voluntary fees based on certain income could increase the size of their pensions and simultaneously make a significant input to form the insurance fund. Legal basis on regulating the voluntary and the private insurance was found in the legislation of countries which have long history of functioning market economy. The additional voluntary and the mandatory pensioning insurance are considered to be an alternative of the increasing expenditures on the voluntary common regime of pensioning insurance. During the last few years mandatory schemes in most of the European countries were oriented to lower insurance instalments and the related lower rates of the compensations. Increase of the latter is achieved through participation in the second and third pillars.

The first practical steps towards pensioning reform in Bulgaria were made in 1994-1995 when the first 5-6 voluntary pensioning funds were established, some of them still operational. By the end of 1999 more than 15 companies were implementing real activities in voluntary pension insurance. The development of the activities in additional voluntary pension insurance can be assessed through the real achievements during the last 5 years. At this stage these achievements concern only the additional pension insurance because the

activities under pillar II has not started yet. The real challenge standing before the pensioning system is its full functioning, operation of all its elements despite the complicated social-economic situation in the country. Licensed pension insurance companies entered their role of leading institutions, called upon to practically turn in reality the main part of the pensioning reform in the country and activate their funds under the second and third pillar of the system. Activity under pillar III is realized by the companies acting also under pillar II. The approve scheme under pillar III defines two types of voluntary pensioning funds:

- Voluntary pensioning fund. Pensioning insurance in these funds can be made only through monthly monetary instalments whose rate is determined by the insurance contracts, but no less than 10% of the minimal labour salary for the country;
- Voluntary pensioning fund with investment bonds. Through these funds a special and very specific for Bulgaria voluntary pensioning insurance is carried out. Funds are created for a period of activity limited up to 7 years. All citizens, owing received by the state bonds for mass privatization can participate. Participants in insurance with bonds have almost the same rights, provided for the citizens who make monetary insurance, but yet not earlier than five years from the date of their individual lot's certification. (3,9).

The new legislation related to pensioning reform applies a very strict conservative regime of the investment activities of pensioning insurance companies and insurance finds. The assets of the additional pensioning funds can be invested in:

- securities, issued and guaranteed by the state;
- securities, issued for the trade at the regulated jobbing markets;
- municipal securities;
- takings on bank deposits;
- real estate and mortgages.

No less than 50% of the pensioning funds assets have to be invested in securities, issued and/or guaranteed by the state and/or takings on bank deposits. Only 5% of the funds' assets can be invested in securities, issued by one commercial company. No more than 10% of the funds' assets can be invested abroad in gilts, municipal bonds and securities, which are allowed for trade by Bulgarian National Bank's decision. Pensioning insurance company cannot land or be a guarantor to third persons using the managed assets of the additional pensioning insurance fund. It shall be mentioned that due to the poorly developed and almost missing capital market in Bulgaria, and because of the limited opportunities to use other financial instruments, the main part of the investment portfolio of currently active pensioning funds consists of stocks, where about 90-92 % of their assets are invested (5,9).

Maintaining long-term investments for longer time period is a specific principle for Bulgarian conditions. Following the limited requirements for liquidity and necessity to maintain insignificant financial resources for current payments of pensioning funds, long-term investment instruments remain in the portfolio until the redemption date. This is the way to minimize the risk and only market risk remains to the diversified securities portfolio.

We could mark several advantages of the opportunity to be insured in additional pensioning fund:

- Insure person's money are separate from the shareholders' moneys through distribution of money flows;

- State Agency on Insurance Control was established and became operational, already controlling the entire activity of the pensioning insurance companies;
- Transparency and mandatory accounting are guaranteed trough the right of the insured to be informed. Participation in professional or universal pensioning fund can be changed by the willingness of the insured 1 year after the beginning of the insurance period. The insured person has the right to transfer the accumulated amounts of his/her individual account from one universal or professional pensioning fund to another universal or professional pensioning fund, established and managed by another pensioning insurance company, but only once per calendar year;
- The interest of the insured persons are protected and represented by representatives of the national professional organizations, members of the trust councils. Such trust councils shall be established to each universal or professional pensioning fund and they will monitor the activities of the funds and make recommendations to protect the interests of the insured individuals;
- Each person, due to ensuring of additional mandatory pension make his/her choice about the universal or professional pensioning fund through an individual statement submitted to the pensioning insurance company. The social partners (national representative syndical organizations) are authorized to perform consultative functions for the choice of an appropriate pensioning fund.

The problems of the new insurance system represent the dualistic role of the advantages. During the last years additional pensioning funds have significant problems with the investments. Currently about 90-95 % of the resource are invested in VS, which means security but with low gains. MPIC states that up to 5%, in special cases by decision of the State Agency of Insurance Control up to 10% of the assets can be invested in corporate bonds of one company. The argument is that this is the way to prevent money flow out. This is not a proper motivation. To each such a thesis could be opposed the other one – that one shall create such conditions which will make the business to prefer Bulgaria instead of other countries.

Ageing and employment policies

The number of people aged over 65 years is growing up (1740000 - 2006) as it was mentioned. Their incomes are very low to assure their health and social well-being. So they have to work additionally or to expect some assistance from the society. This is one of the most important challenges in Bulgaria.

Ageing also has a "women's face" as in most countries women live much longer than men. Gender differences in terms of numbers are most evident in older age groups, which means, that women will be more concerned by ageing. Women are more likely to be found in parallel labour markets such as family businesses, especially in developing countries. However, according to official statistics about 25 per cent of the economically active older population is women. So, as in the majority of countries life expectancy at birth is higher among women than among men, and in most countries women aged 60 and over are expected to live longer than men, a considerable gender imbalance is developing among elderly workers. The upper age limit for population of working age gradually increases, having reached already 63 years of age (in 2005) and for women this age will increase to 60 years in 2009. The consequences of this process concern the whole society. Working people aged 18-65 years (62.8% of the population) has to support 2860000 people (0-17 and 65+ years old). According to prognosis of the UN this burden will increase in future years (2050): 13,8% (-15); 47,6% (15-59); 38,6% (60+). An ageing population means an

ageing workforce, which could lead to a conflict of interest between young people and older workers. Pessimists believe that by 2030 the young and the old will be in conflict, and public finances will be in disorder as a result of ageing (1,2,3,6).

The consequences of ageing are multiple, and include both economic and social aspects. The social results affect family structures, living arrangements, behaviour and attitudes, relations between generations, health and other areas of life. The economic consequences of ageing are associated with the higher cost to society of supporting the elderly population. The implications of ageing which are considered in the present document relate to employment and labour markets, the composition of the workforce, changes in activity rates, gender-related effects, and some others.

As a result of the ageing the financial burden increases borne by the economically active population. The dependency ratio is the number of people under 15 and over 60 for every 100 people in the 15-59 age brackets. The dependency ratio is rising in European countries for persons aged 60 and over, and will have increased to 40 by 2025 from 26 in 1985. In Europe in 1950, there were slightly more than 40 elderly persons per 100 young people. By 1970, this figure had risen to more than 50, while by 1985 it had increased to over 65. As the cost to society of an older person can be several times that of a child or an adolescent, this shift in the age incidence of dependency ratios implies a potentially very substantial rise in public expenditure (6).

Ageing on this scale would place substantial pressures on public finances and reduce growth in living standards. These negative consequences of ageing could be offset by policies to encourage immigration, higher fertility or fast productivity growth. The increase in the number and share of older people poses a number of questions to the society, relative to the state of health, living standards, material support, labour and public activity, social adaptation and integration of older people into society. These topics enter into the social policy sphere, concerning the measures taken with view to improving the state of third age people.

As it's seen from the Table 6 in 2006 the number of insured persons is with more than 2 millions persons smaller than the population if working age. The governors have to resolve the complex problem how to increase the number of people who pay their insurance for pension. Otherwise when these cohorts will achieve the retirement age they will not have any resource in the pension fund.

Table 6. Population, insured persons and pensioners in Bulgaria (in millions)

Year	**Population to 31.12.**	**Population of working age to 31.12.**	**Pensioners total**	**Insured persons**
2000	8 149	4 751	2 379	2 303
2001	7 891	4 671	2 370	2 311
2002	7 845	4 715	2 350	2 170
2003	7 801	4 743	2 336	2 393
2004	7 761	4 781	2 327	2 491
2005	7 718	4 816	2 313	2 597
2006	7 679	4 822	2 271	2 747

Source: NSI, NSSI

On the other side the retirement is a serious problem for aged people: they loose many social contacts, their incomes decrease strongly, and the maintenance of health status requires more resources. The aim of pension schemes is to provide income support to workers too old to continue working. Whatever the system adopted and whatever the method of financing, retirement pensions can be viewed as a deduction levied on the working population. When the number of pensioners increases more rapidly than the number of people in employment, it is logical to expect some difficulty in financing the scheme, whatever the political or economic system in force and whatever the pensions machinery in operation.

Older workers seek employment and are hired or fired mostly in the same labour markets as all other worker categories. It is rare to find special labour markets for them like those that exist for workers with disabilities. The laws of a market economy apply to them, and they are subject to the same competition for jobs as all others. However, older workers are often eliminated from labour markets while their younger colleagues can expect to remain. The following factors explain the difference in the position of older workers: the general labour market conjuncture, the level of a country's development, the economic cycle, the availability of a social safety net, the efficiency of labour market institutions, educational and health factors, the size of the informal sector, labour law, and others. The supply side of labour markets for older workers is affected by economic, legislative, social, health, and demographic factors. Apart from these factors, older workers require skills needed in labour markets in order to be employable. The demand side is also affected by economic, legislative and social factors, but in addition, it is affected by the state of the market and the business cycle. Early retirement, for example, has been used in some countries as a counter-cyclical measure. In Bulgaria since 2000 was undertook a reform in determination of retirement age. It’s calculated as sum of the age of each person and the years of employment and results in a number of points (for males – 100, for females – 93 - 2007) (9).

Unemployment could be considered as discriminatory in respect of older workers unless measures are taken to equalize their chances in labour markets. Older workers who are forced to retire feel excluded from society. What factors affect the labour force participation decisions of older workers? These can be divided into three broad categories. The first involves their eligibility for a pension and the amount of the pension. Being eligible for a pension means a reduced probability of labour force participation. The second factor is the mandatory retirement system. The third factor involves working conditions. Wages, in particular, have an enormous impact on the decision to work. The higher the wages older workers are paid the more likely they are to participate in the labour force.

Discrimination against older workers is a long-standing problem. In fact, older workers were the targets of discrimination already in the "golden age" of full employment in Europe in the post-war years. Age discrimination can be found in both the state and the private sectors, in official policies, and in employment policies pursued at enterprise level. Some age discrimination measures are evident (direct) while others are concealed (indirect). Direct discrimination consists of openly treating older workers less favourably than others. Direct measures include compulsory retirement at a fixed age, a maximum age for recruitment and age limits on access to training (2,3,4).

An obvious manifestation of discrimination occurs in vacancy announcements which impose an age limit of 40 or 45 years. However, age discrimination makes itself felt some 10-15 years before the official retirement age, sometimes earlier, if wage increments depend on length of service. Relatively older people who are still in their prime might find themselves targeted for dismissal.

Retirement programmes and schemes have to be elaborated and the might comprise the following measures: reduced early pensions; more generous invalidity benefits; partial pension benefits to complement income from part-time employment; continuous payment of unemployment benefits and relaxation of registration criteria; enterprise- and industry-level schemes; voluntary early retirement and redundancy arrangements. If a worker who became unemployed at the age of 56 continues to receive unemployment benefit until the age of 60 (the official retirement age), then this worker has been channelled into retirement through an extended period of unemployment. This challenge has to be transform into an opportunity. Such transformation requires the efforts of the society and also individuals for adoption and implementation of rational employment and healthcare policy.

With population ageing, the share of the population in the working ages will shrink and the labour force itself will grow older. This process could become a drag on economic growth unless the decline in labour force growth can be controlled or greater efforts are made to increase labour productivity.

Health care system

The main target of the health policy and health reform in Bulgaria is the improvement of population's health and the health protection system. It includes the following priorities:

- Decrease of infant mortality and improvement of maternal healthcare;
- Limitation of morbidity, mortality and disability resulting from socially significant diseases by the means of designing and implementing healthcare programs;
- Maintenance of efficient anti-epidemiological control;
- Limitations of health risks, ensuring of safe labour conditions and limiting the risks for human health coming from the environment;
- Reduction of risk factors related to the health of aged people and people in unfavourable and non-equivalent status;
- Improvement of the psychic health of population;
- Establishment of preconditions for- and leaving a healthy life, promotion of health and prevention from diseases;
- Elaboration and permanent progress and improvement of the healthcare system and its efficient functioning.

Organization

By the means of the healthcare reform, which started in 1999, a major number of good structural and functional decisions, related to healthcare systems of insurance type combined with some elements of the national health services were applied. This is a new model, more and more applicable in the practice of the different countries, know as a "public-private mix". Following this model, the state, insurance (public and corporate) and private sectors - each of them having its own perimeter of activity, rights and responsibility, are represented in different scale and levels. The most typical feature of the public-private model is that all health activities with divisible effect are in the sphere of the private production of services, with dominant public financing combined with a smaller by size private co-financing. Excluded from this classical market segment are only those healthcare problems, for which the user is not able to take self dependent decisions, for example emergency, stationary psychiatric aid and other similar decisions. At the same time any healthcare activities with an inseparable effect, such as state health control, programs on the governance of socially significant diseases, mandatory health treatment,

anti-epidemiological measures, etc., still remain in the sphere of the public financing and the dominantly public and smaller scale private production of those services (13,14,15).

Reforms in the sphere of curative health protection are radical and exceptionally serious. The rights of the patients were regulated and protected in relation with the medical aid, rendered in the medical institutions as well as the rights of the medical specialists, providing medical assistance and healthcare. Reforms in the sphere of curative health protection started with the adoption from the National Assembly five new structural laws on health protection system in the period before 2000 and in 2004 another one, concerning dominantly public health protection. They are as follows:

- Law on healthy and safe labour conditions -1997;
- Law on health insurance – 1998;
- Law on physicians' and stomatologists' professional organizations – 1998;
- Law on medical institutions (ЗЛЗ) – 1999;
- Law on drugs and pharmacies of human medicine – 2000;
- Law on health – 2004.

Through these laws the structure, scope, organization, management and financing of the medical, stomatological and drug activities were determined. Another important characteristic of the changes in the medical care system is regulating the contractual outset of the relations between medical institutions and the financing bodies, namely the National Health Insurance Fund (NHIF). All Bulgarian citizens are mandatory insured through specific set of medical aid, which is paid by the NHIF. Medical car is provided in the medical institutions based on a contract between them and the NHIF substructures – the Regional Health Insurance Funds (RHIF). RHIF pay to the medical institutions the provided medical services based on specific prices. Increasing the share of the voluntary health insurance associations will break up the monopoly of the NHIF. Third important characteristic is ensuring the right of the customer to choose a physician and stomatologist for primary aid, medical institution for specialized extra-hospital aid, and since 01.01.2004 – for hospital aid. Thus the administrative compulsion for choice and limitation of citizens' rights to chose specialists or medical institutions were eliminated.

The legally regulated management, juridical and economic independence of the entities in the area of healthcare – medical institutions and financial bodies, together with the enforcement of contractual relations and the right of free choice of the customer, are the main preconditions for the establishment of medical services market and competition among the healthcare institutions.

Financing

National Health Insurance Fund finances the healthy care for insured citizen (health insurance is mandatory in Bulgaria). In cases when citizen is insured also in voluntary health insurance association, then expenses on his treatment, depending on his contract, are paid by the concerned association as well. When the citizen is hospitalized following his personal desire and without any direction from his general physician or specialist, then he/she pays on his own the costs of his/her treatment. The citizens, which are mandatory insured, except for the insurance instalment, are paying also a fee for each primary visit to the physician or stomatologist, a customers fee at the amount of 1% from the minimal working salary, and for each day of treatment in medical institution (but no more than 10 days per year) the amount of 2% from the minimal working salary. Certain categories of citizens are exempted from customer's fees.

Public costs for healthcare have reached 265 BGN per capita in 2006, which is twice more than in 2000. As a percentage of GDP, the public expenses on healthcare during the last five years are sustainable positioned in the range 4-4.3 (average). Following the WHO's expert evaluations for the same period private financing for healthcare has approximated the size of the public one. Great part of the private financing is unregulated by legislation and is deemed to the detriment of the good practices (5,15).

Access to heath care

Outpatient healthcare

Territorial distribution and coverage with health institutions of the country as well as its planning is regulated by the national and regional health protection maps, which are updated each five years. They contain the number of the different medical institutions in the different territorial units (regions and municipalities). These medical institutions conclude contracts with the Regional Health Insurance Funds for providing of healthcare to the concerned population. Equality between public (state and municipal) and private institutions is legally regulated. Main characteristic of the reform in the healthcare system is the radically changed legal status and the full juridical, financial and economic independence of the medical institutions:

- Individual practices for primary and specialized physicians' and stomatological aid can be registered from- and are property of the respective physicians and stomatologists;
- Group practices for primary and specialized physicians' and stomatological aid, medical, stomatological and mixed centres, diagnostic and consultative centres and medical-technician's laboratories and hospices are established in the form of commercial entities or cooperations. When necessary such institutions can be established as associations with limited responsibility or joint stock companies from the state or municipalities, independently or jointly with other entities;
- Medical care institutions, medical and social care institutions and dispensaries are established from the state and the municipalities, from legal and physical persons in the form of commercial companies or cooperations;
- Property and responsibility of the state remain: emergency centres, centres for transfusion, hematology, institutions for stationary psychiatric aid, institutions for medical monitoring and specific care for children, and also some medical institutions at different ministries (Ministry of Defense, Ministry of the internal affairs, Ministry of transport, Ministry of justice);
- Hospital (inpatient) healthcare.

Medical institutions for hospital care are multiprofiled and specialized hospitals and they can be: for active treatment; for restoration to health and extended treatment; for rehabilitation, etc. Depending to the territory and the related accreditation hospitals can be: district, regional, interregional, university and national hospitals.

All hospitals for active treatment, rehabilitation and long-term treatment as well as hospices were transformed in 2000 into companies with limited responsibility or joint venture companies. They are not yet privatized but a procedure for privatization of part of them is on the way. The payment of the inpatient care is based on contract with the NHIF following the group of disease, defined as "clinical paths". Each hospital is authorized to sign a contract for financing with all twelve associations for voluntary health insurance.

Hospital doctors are paid under labour agreements, which are formed within 40% of the hospital income. Though registered as corporations, hospitals receive its financing from NHIF following the administratively established prices. Once a year negotiations are held between the NHIF and the professional organizations of the doctors to negotiate the

specific rate of these prices. Latter are listed in the National Framework Contract. Due to exceeded expenses of the NHIF, those prices can be revised once at every 6 months. Each insured person pays for each day of treatment in medical institution, but no more than 10 days per year the amount of 2% from the minimal working salary. The improper financing of the treatment in medical institutions led to the emerging of a serious black market. Limited number of state hospitals is financed by the state, municipalities have no financing functions (13,16).

The status of the healthcare is one of the most synthetic indices for the levels of the economic development and quality of life. Unfortunately in Bulgaria this is the sector where structural reforms have failed in great extend. If we summarize what was achieved during the period of transition main results were attained in placing the financial relationships among the state, customers and providers of medical services on the basis of the health insurance; entrusting the outpatient aid to the general practitioners and specialists; increasing of their incomes; improvement of some of the indices for hospital equipment's utilization. However, negatives are much more.

The negative balance of the healthcare reform can be seen through the worsened indexes of the nation's common health status. Mortality has increased. Reasons are mainly diseases of blood circulation system: two thirds of the lethal cases were caused by infarcts and apoplexies. Second ranked are cancer diseases, whose growth is rising rapidly. Disorders of respiratory system are main reasons for hospitalization as half of the cases are with lethal outcome and are caused by pneumonia. Another alarming tendency is the growing distribution of psychic disorders. They rarely lead to preliminary death and thus remain out of the health statistics focus. The number of the disabled people increased three times during the period of transition as the newly registered cases are almost twice more than the average for the European Union and one of the highest in world. Disorders of blood circulation system are the most frequent causes for such harms and lethal cases.

An important index for the efficiency of the healthcare is mortality among children below one year. In the beginning of the transitional period Bulgaria was positioned close to the Central and Eastern European countries and better than Poland and Hungaria. Seventeen years later Bulgaria is at the bottom of the list. Only Albania and Romania from the Balkan Peninsula countries have higher mortality rates of the new-born. The probability that a child die in Bulgaria before it becomes 5 years old is three times higher than in the EC-15 and twice than in the new EC member states. The causes for the infant high mortality are most often preliminary birth, complications during the prenatal period, diseases of respiratory system and different infections. The years of transition are marked with the worsening of some health indices, which reflect problems that are specific for the low income countries: distribution of tuberculosis and hepatitis. Besides, these evidences for ineffective healthcare system are average statistical ones, i.e. they hide the higher values of these rates, including mortality of the new-born in the villages and the regions of compact ethnical population.

Worsened health indices are partially due to the negative demographic tendencies – decreased birth rate and emigration of young people abroad sharpen the problem of the ageing of population. The main reason for these bad tendencies more and more becomes the limited access to health services. Serious obstacle for the access to health aid is the income drop down and the increased economic vulnerability of the population, combined with the transition to health insurance system. Low incomes and increased health risks are bound into a wicked circle where due to the lack of labour people remain out of the health aid scope. As a result bad peoples' health limits their access to the labour market, increases their poverty and social isolation.

Unemployed people and people with low incomes are not the only ones who are facing higher health risks due to the transition to market economy. To different extent it concerns the entire society. The reason is that liberalization of prices and entrepreneurship were not accompanied with adequate legal and institutional measures for protection of the employees and customers' rights. This led to increasing of health risks at the working place and at home. State is not yet completely effective in applying the standards for safety at working place and safety of foods, as well as environmental protection standards and it also has no clear policy for protection of the customers from monopolistic or oligopolistic drug prices. High social and economic stress combined with a weaker protection of employees and customers resulted in worsening the health status and life quality of the population.

Bulgarians, however, pay health insurance fees and as much as this from his pocket. Besides, in distinction from the practice in the countries with developed health insurance systems, these private payments are not voluntary health insurance but direct payments for health services (Tables 7 and 8).

Table 7. Health economic indicators in Bulgaria

Indicator	Value(year)
Total expenditure on health as percentage of gross domestic product	8.0 (2004)
General government expenditure on health as percentage of total expenditure on health	57.6 (2004)
Private expenditure on health as percentage of total expenditure on health	42.4 (2004)
General government expenditure on health as percentage of total government expenditure	11.6 (2004)
External resources for health as percentage of total expenditure on health	1.0 (2004)
Social security expenditure on health as percentage of general government expenditure on health	49.6 (2004)
Out-of-pocket expenditure as percentage of private expenditure on health	98.0 (2004)
Private prepaid plans as percentage of private expenditure on health	0.2 (2004)
Per capita total expenditure on health at average exchange rate (US$)	250.8 (2004)
Per capita total expenditure on health at international dollar rat	671.2 (2004)
Per capita government expenditure on health at average exchange rate (US$)	144.4 (2004)
Per capita government expenditure on health at international dollar rate	386.3 (2004)

Source: WHO, National Health Accounts 2007

Practically this share is much higher because the WHO's statistics includes only regulated personal payments from clients. Out of it remain corruption payments which exceed the regulated ones in time.

Therefore the weight of the health payments, made by the patients in Bulgaria is bigger than in rest of the European countries.

Table 8. Public expenses on health protection

Expenses of the private sector	Percentage of the GDP*						USD per capita average annual rate**				
	1999	2000	2001	2002	2003	2004	1999	2000	2001	2002	2003
Czech Republic	6.0	6.0	6.3	6.6	6.8	6.5	347	327	373	471	600
Hungaria	5.4	5.0	5.1	5.5	6.1	6.0	250	231	258	348	495
Poland	4.2	4.0	4.3	4.7	4.5	4.5	177	172	210	234	248
Slovakia	5.2	4.9	5.0	5.1	5.2	5.1	196	186	193	228	318
Slovenia	5.8	6.7	6.9	6.8	6.7	6.7	628	640	683	751	930
Estonia	4.9	4.3	4.0	3.9	4.1	4.2	197	170	176	203	282
Latvia	3.8	3.3	3.2	3.3	3.3	3.3	114	107	110	129	155
Lithuania	4.7	4.5	4.6	4.9	5.0	4.9	145	148	160	197	267
Bulgaria	3.9	3.7	4.0	4.5	4.1	4.3	63	58	69	88	104
Romania	3.4	3.5	3.6	3.8	3.8	3.4	54	59	65	79	100
Albania	3.1	2.8	2.8	2.8	2.7	2.7	35	33	37	41	49
Croatia	7.5	8.1	7.2	6.5	6.5	6.6	333	330	317	325	413
Bosnia and Herzegovina	6.1	5.0	4.4	4.4	4.8	4.6	76	58	54	62	85
Serbia and Monte Negro	4.1	3.6	-	-	-	-	45	34	54	86	136
F Y R of Macedonia	5.4	5.1	5.1	5.8	6.0	5.9	98	91	86	107	136

Source: * TransMONEE 2007; **WHR 2006

Briefly said, expenditures on healthcare in the range of 7 – 8 percent from the GDP (not counting the informal) are not low at all when compared with international rates. The problem is that in our country they are improperly distributed referring to the direct personal payments. That is why the priority of the health reform shall be not the increase of the mandatory health insurance fee, but the directing of this significant resource of official and unofficial direct payments which, following the most conservative evaluations, are in the range of 3-4% from the GDP, for health services and to the currently narrowed market of additional private insurance packages. Precisely, this is the substance of the healthcare restructuring in direction to more competitive and customers' oriented choice, leaving the state without an opportunity to transfer its responsibilities to the market. Developed health systems account at highest extent on the economical stimulators. Regulation and control are vitally important as far as they aim at protecting the rights of the customers and the suppliers. The quality of the health services though can be achieved through competition and incentives (13,14,15).

In our country the reform is based on total administrative control instead of adequate financial stimuli. Moreover, control is mainly at the entrance of the system. Its basic tools are accreditation of medical institutions and medical standards. Accreditation of medical institutions aims at insuring of minimal standards of technical equipment and qualification, which are necessary for the relevant services, covered by the NHIF. The funds reimbursed by the NHIF are not bound to the quality of the services. Thus after obtaining the accreditation and covering the standards, medical practices and hospitals have no incentives to invest in capacity building, new technologies and direct capitals for

the improvement of the healthcare quality. The system is designed in such a way that it could cover a general minimal level of the standards.

Taxation of hospitals is also a push back instrument. Hospital services are VAT-free and this puts hospitals in the position of end consumer of drugs, medications, equipment, i.e. they do not have the right to take a tax credit for these expenses. Thus they are encouraged to increase their costs for labour instead of investments, medications, external services, including training of the staff. State regulations also act in this direction. Hospitals cannot reallocate for salaries less than 40% of the funds, coming from the NHIF. There is no upper limit of the salaries. Also there is no bottom limit for drugs and medications. Having these regulations in place and the insufficient coverage of the expensive clinical paths, it is not curious that hospitals try to transfer expenditures for drugs and medications to the insured patients, though they are not included in the value of their clinical paths. It is evident that currently healthcare policy cannot find an adequate answer for the problems related to the blocked health reform in the hospital sector, nor for the mistaken system for financial stimuli and inadequate quality control management through the instruments of the administrative control at the entry of the system. The society's attention though, is attracted by the salaries of the doctors and their appeals to the state to equip at least some of the priority hospitals. Who will equip the others – this is not clear. The state transfers its responsibilities to the hospital managements and tries to combat the health insurance inefficiency with an increase of the health insurance fees (Table 9 and 10).

Table 9. Inpatient Health Protection 1995, 2000, 2002, 2004, 2005, 2006

Indicator	**1995**	**2000**	**2002**	**2004**	**2005**	**2006**
Number of hospitals	289	253	248	257	262	270
Number of beds for treatment of	87	53	45	43	45	43645
acute diseases	148	993	711	597	537	
Including private sector	139	306	475	819	1 565	2004
Average continuity of hospital	13.7	11.5	9.2	8.2	7.9	7,2
sojourn						

Source: National Health Information Centre

The concept "communication" describes concrete mechanisms of social inclusion through direct forms of interaction. In order to overcome the isolation of elder and aged people and provoke their activity, the programme provides for establishment of self-support groups in the community, and depending on their interests creation of different forms of communication leading to satisfaction of their personal necessities. The main targets are as follows:

Target 1: development of knowledge and practical skills and directions for healthy lifestyle and nourishing:

- Establishment of habits for active motor regime, comparable to the personal possibilities of each individual. Necessity and meaning of activity shall be explained and information concerning the existing groups, called "For health" to be distributed. New groups to be established.
- Creation of skills for the development of individual hygiene-diet regime by the means of health educating discussions on the importance and the necessity of healthy nutrition and its impact on the general health-psychic status of the individual.

Table 10. Public and private expenses on health protection in Bulgaria

Indicator	1999	2000	2001	2002	2003	2004
Percentage of GDP	6	6.2	7.2	7.9	7.5	7.7
Including - public (%)	65.4	59.2	56.1	56.6	54.5	55.8
- private(%)	34.6	40.8	43.9	43.4	45.5	44.2
Including „from the pocket" (%)	99	99	99.2	98.4	98.4	-

Source: *WHR 2006 (until 2003), Health Systems in Transition: Bulgaria 2007 about 2004*

Target 2: adaptation to age alternations in conditions of market economy for achievement of better life quality

In order to support elder people with knowledge and advice of how to adapt to age alternations in the conditions of market economy for achieving better life quality and active old ages, a project for training of trainees (specialists and aged people) shall be realized in different concerned regions. Programmes shall be implemented by teams consisting of specialists-gerontologists and social experts from the municipal centres of social care taking into account the specific structure of population, cultural and economic specifics by regions.

Conclusions:

1. Up to now, older workers have been the losers in labour markets as a result of official employment policies and labour market measures. All workers may experience spells of unemployment interrupting their careers, but older workers suffer disproportionately from non-employment. In addition, once interrupted, their careers are much more difficult to resume. Present policies in respect of older workers still generally consider them as **a labour reserve** rather than as active labour market participants.
2. Some forms of employment have turned out to be the niches preferred by workers in the upper age groups. Older workers should be provided with opportunities to update existing skills and acquire new skills. Older workers can also benefit from measures promoting self-employment.
3. Increasing the retirement age leads to growth in the economically active population and decreases the number of pensioners. Hence, the impact on GDP would be favourable, and a better chance to balance pension schemes will be provided. However, increasing the retirement age requires simultaneous employment promotion to ensure that jobs are available to all jobseekers.
4. Workplace and working time adjustments can be effective tools for promoting the employment of older workers. At the same time they are relatively lower cost solutions.
5. Additional research is required on older workers, and new issues for such research have to be identified.
6. Courses for training of elder and old people aim at acquainting the audience with the main problems of aging and old age. Main tasks are improvement of health competence and motivation for healthy lifestyle, application of contemporary approaches for overcoming the stressogenic situations and development of skills for obtaining of higher living standard in the conditions of market economy.

7. The process of ageing affects all areas of human's life. Concerning economy, the impact affects the economic growth, savings, investments, demand, labour market, pensions, and tax policy. The impact to the social sphere covers health care, population's health status, family composition and family lifestyle, residential conditions and migration of population. Specific feature of the ageing is its extension. Consequences of ageing discover new challenges and also numerous problems to be solved.

EXERCISES

Task 1

Make an optimistic prognosis for economic and demographic development of the country and population.

Task 2

Make a pessimistic prognosis for economic and demographic development of the country and population.

Task 3

Analyse the economic and demographic problems of your region and suggest measures for resolving problems.

REFERENCES

1. Marinov, St. Basic tendencies in development of Bulgarian population. J. Economic thought, 2001/1,p.75-92.
2. Samorodov, A. Ageing and labour markets for older workers. ISBN 92-2-111418-X; ISSN1020-5322.
3. www.nssi.bg Bulletin, 2007, available from 2007.
4. www.who.int, available from 2007.
5. www.nsi.bg, available from 2007.
6. World population 1950-2050, UN, 2002.
7. Angelov, I. Economics of Bulgaria and European Union (Икономиката на България и Европейския съюз; Стратегия за догонващо развитие) BAS – Institute of Economics, Sofia, 2003.
8. www.econ.bg, available from 2007.
9. www.mlsp.government.bg, Bulletin, 2007, available from 2007.
10. The concealed economics in Bulgaria, Sc. Redactor Iliev, P. (Скритата икономика на България, н. ред. Илиев, П.) www.ced.bg – Bulletin, ISBN 954-477-120-4.
11. Tchobanov, D. - www.ime-bg.org, Bulletin, 2008 available from 2008.
12. www.ced.bg, Bulletin, 2007, available from 2007.
13. Gladilov, St. A Model of a Strategy for Overtaking Economic Development of Public Health for the Period till 2020 – J. Health Management, Bg, 5, 2005, № 3, 5-11.
14. Vodenitcharov, Tz., V. Borisov, St. Gladilov, K. Tchamov, D. Krashkov A Model for Efficient Development of Public Health in Bulgaria - J. Health Management, Bg, 5, 2005, № 2, 5-14.
15. www.nchi.bg, Bulletin, 2007, available from 2007.

16. Petkov, V. Patients' attitude towards the health insurance system. - J. Health Management, Bg, 5, 2005, № 1, 10-13.

RECOMMENDED READINGS

1. Elizabeth W. Markson, Boston University, SOCIAL GERONTOLOGY TODAY Afterword by Stephen J. Cutler, University of Vermont Roxbury Publishing Company, 2003, First Edition, ISBN: 1-891-48789-2
2. Leslie A. Morgan, Suzanne Kunkel, AGING: THE SOCIAL CONTEXT. Pine Forge Press, 2001. ISBN: 0761987312
3. ACTIVE AGEING. A policy framework. whqlibdoc.who.int/hq/2002/WHO_NMH_NPH_02.8.pdfFRAME

ABBREVIATIONS

VPF	Voluntary Pensioning Fund
NHIF	National Health Insurance Fund
RHIF	Regional Health Insurance Fund
GDP	Gross Domestic Product
NSI	National Statistics Institute
NII	National Insurance Institute
WHO	World Health Organization
BGN	New Bulgarian Lev (Bulgarian national currency) BGN 1 = 1.95583 euro (fixed rate)