Actuarial Report on Social Insurance

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INTRODUCTION

In this report, the Social Insurance Department of the Ministry of Labour and Social Affairs continues its efforts to have a regular evaluation of the social insurance system conducted by actuaries. This is the second such actuarial report, and sums up statistics from the past five years and analyses changes made in the last two years, with respect for the three years preceding the reporting period. Therefore, this report follows up on the previous report, which summarized figures since 1996.

This report keeps to the same structure as the previous report, with four parts. In Part A, general information about the social insurance system is summarized, including legislative changes since 2002. Part B contains an assessment of the basic social insurance indicators for the past five years. Part C discusses long-term projections; unlike the last report, these projections are made for an extra 35 years into the future (until 2065). In the final part, Part D, there are recommendations stemming from an evaluation of the current situation and from the conclusions of projections which are intended to improve the system and, in particular, ensure its financial stability. The Annex offers a range of examples of how to calculate the individual social insurance benefits.

This report was drawn up by the Actuarial Unit of the Social Insurance Department of the Ministry of Labour and Social Affairs in cooperation with the Pension Insurance and Sickness Insurance Unit within the same department, based on statistics supplied by Czech Social Security Administration (ČSSZ – Česká správa sociálního zabezpečení) and using the analyses and prognoses of experts in demographics and economics. The aim was to provide objective information not only on the system's current situation, but also on possible future developments, and on the related recommendations.

The authors, staff of the Actuarial Unit, P. Böss, J. Feistauerová, S. Hošková, Jana Klimentová, D. Skývová and J. Škorpík, would be grateful for any comments or suggestions you might have concerning this report.

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PART A

GENERAL INFORMATION ABOUT THE SOCIAL INSURANCE SYSTEM

A.1. BRIEF SYSTEM CHARACTERISTICS[1]

The social insurance system includes basic compulsory pension insurance and sickness insurance. Besides social security premiums, contributions for the state employment policy are also collected in the scope of this system.

A.1.1. PENSION INSURANCE

The key substantive provision regulating entitlements under basic compulsory pension insurance due to old age, disability, or death of a provider is **Act No. 155/1995, on pension insurance** (hereinafter referred to as 'Pension insurance Act'), which the lower parliamentary house – the Chamber of Deputies – passed on 30 June 1995. The Pension insurance Act entered into effect on 1 January 1996. It has been amended several times.

The key **substantive provision** regulating entitlements under basic compulsory pension insurance due to old age, disability, or death of a provider is Act No. 155/1995, on pension insurance (hereinafter referred to as 'Pension insurance Act'), which the lower parliamentary house – the Chamber of Deputies – passed on

[1] The present Czech system of pension insurance comprises two parts: a basic pension insurance system (used to provide old-age pensions, full disability pensions, partial disability pensions, widow pensions, widower pensions, and orphan pensions) and a supplementary system, which includes state-subsidized supplementary pension schemes (Act No. 42/1994, on state-subsidized supplementary pension schemes, used to provide permanent old age and disability pensions and superannuation, temporary survivor pensions, lump-sum settlements, and severance pay) and other forms of individual security by means of products offered by commercial insurance companies. Information on state-subsidized supplementary pension schemes can be found in the Annual Report published by the Finance Ministry's Office of State Supervision in Insurance and Pension Funds and in the publication entitled 'Supplementary Pension Insurance with State Contribution', published every year by the APF CR.

30 June 1995. The Pension insurance Act entered into effect on 1 January 1996. It has been amended several times.

Participation in basic pension insurance is compulsory if set conditions are met. The Pension insurance Act, which contains the relevant substantive legislation, also allows for voluntary participation in pension insurance in a set scope within the framework of basic compulsory pension insurance.

The different groups of participants (persons in an employment relationship, persons in a service relationship, members of cooperatives, the self-employed, and other groups of participants) are all subject to **the same legislation**.

Persons who meet the conditions stipulated under the law have a **legal entitlement to a pension**.

All **decisions** on claims to benefits under pension insurance, and the amount or payment thereof, are **subject to judicial review**.

Basic pension insurance is **economically guaranteed by the state** because pensioners cannot be left without a source of income on which they are able to rely for subsistence.

The **principle of merit** is only reflected in pension insurance to a limited extent and is suppressed by the current application of the principle of **social solidarity** (the existence of reduction limits, whereby a set method is applied to restrict entitlements stemming from higher incomes, leads to a decline in the relative level of the pension as the income creditable for the purposes of pension insurance rises).

The **dynamic nature of the basic pension insurance system** is ensured by an annual update of the income used as the basis when calculating the percentage assessment of the pension and when raising the amount of pensions granted.

The following pensions are supplied under the basic pension insurance system:

- **old-age pension** (including old-age pensions granted before the insured person reaches retirement age – 'early old-age pension'),
- **full disability pension**,
- **partial disability pension**,
- **widow and widower pensions**,
- **orphan pension**.

In essence, only benefits derived from the insurance period and from earnings achieved are awarded under pension insurance. The exception is the **full disability pension**, which is granted to pensioners holding the status of '**persons disabled from youth**'.

In addition to the pensions granted out of pension insurance, an **increased pension for the incapacitated** is also available, although this is paid out as a 'pension security' benefit[2] (rather than as a pension insurance benefit). In the future, this benefit should be transferred to a different system.

A pension is composed of two elements (dual-component structure):

- a basic assessment which is the same for all types of pension, regardless of the insurance period and earnings achieved,
- a percentage-based assessment derived from the insurance period and earnings achieved.

The structure used to calculate a pension contains a whole number of elements; those related to the earnings decisive for the pension are adjusted annually in line with general wage developments.

The basic rules for pension adjustments are regulated in Section 67 of the Pension insurance Act and up until 30 June 2002 were as follows:

- all pensions granted are subject to increases,
- the government is authorized to increase pensions by decree if the aggregate consumer price index has risen by at least 5% since the calendar month immediately preceding the calendar month in which the last pension rise was made,
- increases must correspond to at least 70% of the growth registered by the aggregate consumer price index,
- at least once every two years, when the amount of the pension increase is set, account should be taken of the growth in real wages, such being by at least a third,
- the factors required when setting the amount of pension increases are determined according to figures available from the Czech Statistical Office (the aggregate consumer price index, the average nominal wage) and Czech Social Security Administration (the amount of the average old-age pension).

With effect as of 1 July 2002, the following rules (which still apply) were approved:

- granted pensions are increased on a regularly yearly basis (every January); this principle does not apply only in cases of very low inflation (where the increase would be less than two per cent) or very high inflation (at least ten per cent),
- the increase in pensions is appointed in a manner whereby, for an average old-age pension, the rise is at least 100% of the price growth and at least one third of the increase in real wages,
- the specific amount of an increase is set by the government by decree; the increase may be higher than the above-mentioned minimum rise stipulated by law,

[2] Sections 7 and 70 of Act No. 100/1988, on social security, as amended.

- when making the regular January increase, the rise in the aggregate consumer price index for households is ascertained for the twelve months up to July of the previous increase in pensions; in order to determine the rise in real wages, the decisive calendar year is the year preceding the year of the increase in pensions by two years,
- pensions can be increased outside the times appointed under the law if price growth in the monitored period amounts to at least 10%; the government makes a decision on such an increase within fifty days of Fulfillment of this condition.

A.1.2. SICKNESS INSURANCE[3]

The key law regulating the definition and entitlements of participants is Act No. 54/1956, on sickness insurance, which has been amended frequently over the almost fifty years that it has been in force.

Sickness insurance is **compulsory for employees and members of the armed forces and other corps**; since 1994 it has been **voluntary for the self-employed**.

The sickness insurance system is essentially **uniform** for all gainfully employed persons, with a few exceptions.[4]

Sickness insurance is **guaranteed by the state** financially and legally.

The **principle of merit** is reflected in sickness insurance to a limited extent only; it is restricted by the current application of the principle of **social solidarity** (for the same reasons as in the pension insurance system).

[3] Besides the state-controlled compulsory sickness insurance system, voluntary insurance through commercial insurance companies is gradually spreading. Currently 50,000 - - 100,000 citizens are insured with these companies. Fuller-scale development is prevented by the high deductions from the income of economically active persons, which does not leave much available room for additional regular voluntary payments, and also by the lack of information supplied about the opportunities of commercial insurance, as well as insufficient awareness of the risks connected with extended sick leave, especially among groups of higher income employees.

[4] Members of the armed forces are entitled to sickness benefit as of the second month of sickness, because they receive their wage in the first month of sick leave. Certain other persons, e.g. judges and members of parliament, are entitled to their wage over a set period of sick leave. The sickness welfare of members of the armed forces includes an allowance for the burial of a soldier.
Some insured persons are only entitled to certain benefits under sickness insurance. For example, students and secondary-school pupils are only entitled to maternity benefit, some employees are not entitled to a nursing allowance or an equalization allowance during pregnancy and maternity (e.g. employees working under an agreement to perform work, or voluntary healthcare service workers); the self-employed are not entitled to these benefits out of sickness insurance either. Members of the armed forces and home workers are not entitled to a nursing allowance.

The **dynamic nature of the system** is determined by an annual update of the reduction limits applied to income, used as the basis when calculating benefits in accordance with wage developments.[5]

Following the detachment of health care in the 1950s, the detachment of spa centre treatment in 1993, and the detachment of children's allowances, birth allowances, and funeral benefits in 1995, which were transferred to the health insurance and state social welfare systems, the benefits specified below are currently provided under the sickness insurance system:

- **sickness benefit**,
- **family member care benefit**,
- **maternity benefit**,
- **pregnancy and maternity compensation benefit**.

Sickness benefit is granted for calendar days as of the first day of sickness and is calculated based on the average gross wage for the twelve calendar months prior to the claim.

A.1.3. FUNDING

The financing of the social insurance system is based on the principles of PAYGO financing. This means that expenditure on benefits in a given period is covered out of revenues from the premiums collected in this same period.

The regulation of funding relations is contained in **Act No. 589/1992**, on social security premiums and state employment policy contributions, as amended, which entered into effect on 1 January 1993. In particular, this Act lays down:

- the **group of payers** liable for the premium (including the state employment policy contribution),
- the **method of appointing the amount of the premium**, the payment of the premium, and the duties of those who pay the premium.

Premiums for social security (sickness insurance and pension insurance) and the state employment policy contribution are collected in accordance with this Act.

Premiums and state employment policy contributions are income of the central government budget. Other central government budget revenues are penalties, surcharges on social security premiums, and fines imposed in accordance with Act No. 589/1992, as amended. Increases in the relation between premiums paid and benefits granted were monitored by the establishment of a premium collection unit. With effect as of 1 January 1996, a separate pension insurance account was

[5] In connection with the reform of public budgets, a decision was made to halt the effect of the corresponding provision of the Sickness Insurance Act, and not to increase the reduction limit in 2004 and 2005.

set up as part of state financial assets. This account holds all assets arising from the difference between revenues from pension insurance premiums and payments of pension insurance benefits. The assets in this account can only be used to increase benefits or to cover a shortfall in pension insurance premiums, including expenditure connected with the collection of pension insurance premiums. The collection of premiums is the responsibility of district social security administrations.

Premiums are paid by employees, employers, and the self-employed. The amount of the premium is determined as a percentage (Table 1) of the assessment base ascertained for the period in question. Premiums are calculated based on creditable income prior to taxation; in the case of self-employed persons creditable income is reduced by expenditure spent on achieving, ascertaining, and maintaining this income; the basis for the premium payment as of 2006 will be 50% of the difference between revenues and expenditure (in 2004 it is 40%, in 2005 it will be 45%).

Table 1. Percentage tariffs for premiums applicable as of 2004

[% of the assessment base]

	Pension insurance	Sickness insurance	State employment policy	Total
Organizations and small organizations	**21.5**	**3.3**	**1.2**	**26**
Employees	**6.5**	**1.1**	**0.4**	**8**
Self-employed	**28**	**4.4**	**1.6**	**29.6**
		voluntary		or 34
Persons voluntarily insured for a pension	**28**	**-**	**-**	**28%**

Source: Ministry of Labour and Social Affairs.

A.1.4. SOCIAL SECURITY ORGANIZATION AND IMPLEMENTATION

Act No. 582/1991, on the organization and implementation of social security, as amended, entered into effect on 1 January 1992. Under this Act:

- Social security is the responsibility of social security authorities and organizations. Municipalities also carry out activities related to social security.
- Social security authorities are:
  - the Ministry of Labour and Social Affairs,
  - the Czech Social Security Administration,
  - district social security administrations,
  - the Ministry of the Interior,
  - the Ministry of Justice,
  - the Ministry of Defence.

There are ongoing attempts within the framework of the existing organizational structure to make a general improvement to administration, in particular by increasing the standard of technology available, with the aim of creating a modern institution with a high degree of client contact. There are efforts to speed up the settlement of applications for benefits[6] and activities are under way that are linked to the introduction of a register of insured persons, which should improve the quality and speed of the tasks carried out by Czech Social Security Authority (Česká správa sociálního zabezpečení – CSSZ) in accordance with social security legislation, including Community law and international agreements on the implementation of social security. Legislative changes in the organization and implementation of social security which entered into effect in January 2004 make it possible to keep 'annual pension insurance records', which can be sent to the CSSZ; as part of this system, information about the individual insured persons will be updated in CSSZ records every year. As a result, starting in 2006 it will be possible for the CSSZ to provide insured persons, on request, with an informative personal pension insurance certificate every year, containing information about the amount of the assessment base and the insurance period.

A.2. LEGISLATIVE CHANGES SINCE THE BEGINNING OF 2002

A.2.1. PENSION INSURANCE

(A) Legislative changes which have entered into force

- **Act No. 353/2001 –** effect split, i.e. as of 5 October 2001 and 1 January 2002. The change in the Pension insurance Act relates to the fact that increases in the reduction limits, which are used to set the calculation base from the personal assessment base in order to calculate the pension, are no longer tied to the condition that pensions must be increased at the same time by at least five per cent.
- **Government Decree No. 346/2001 –** effective as of 1 January 2002. This decree appoints the general assessment base for 2000 (CZK 13,490), sets the amount of the conversion coefficient for the adjustment of the general assessment base for 2000 (1.0942), and increases the reduction limits to CZK 7,100 and CZK 16,800 for the calculation of pensions awarded as of 1 January 2002.
- **Act No. 198/2002 –** effective as of 1 January 2003. In connection with the adoption of the Voluntary Service Act, there was an expansion in the group of persons who can take part in voluntary pension insurance in accordance with the Pension insurance Act. At the same time, a condition for participation in

[6] In 2003, the average time it took to handle a pension insurance benefit was 55.5 days.

voluntary pension insurance, i.e. the previous acquisition of at least one year's 'compulsory insurance', was rescinded.

- **Act No. 263/2002 –** effective on the first day of the calendar month following promulgation, i.e. on 1 July 2002. Under the amendment to the Pension insurance Act, the condition of the payment of premiums will not be considered fulfilled in cases of insured persons who are in the employment of a commercial company which, as the employer, fails to pay social security premiums or the state employment policy contribution, whereby these insured persons are associates or members of the statutory body or Supervisory Board of the company.
- **Act No. 264/2002 –** effective on the first day of the month following the date if promulgation, i.e. as of 1 July 2002. This amendment to the Pension insurance Act involves the introduction of a regular increase in pensions in January of each year, and more precise rules on pension increases, whereby rises can be decided on the basis of final statistics, not just on the basis of estimates of the relevant indicators (see paragraph A.1.1.).
- **Government Decree No. 438/2002 –** effective as of 1 January 2003. As of January 2003, pensions awarded before 1 January 1996 were increased by a 4% percentage-based assessment, and pensions awarded between 1 January 1996 and 31 December 2002 were increased by a 3.8% percentage-based assessment.
- **Government Decree No. 439/2002 –** effective as of 1 January 2003. This decree set the general assessment base for 2001 (CZK 14,640) and increased the reduction limits to CZK 7,400 and CZK 17,900.
- **Government Decree No. 489/2002 –** effective as of 1 January 2003. This decree set the conversion coefficient for the adjustment of the general assessment base for 2001 (1.0693).
- **Government Decree No. 337/2003 –** effective as of 1 January 2004. As of January 2004 pensions were increased by a 2.5% percentage-based assessment.
- **Government Decree No. 338/2003 –** effective as of 1 January 2004. This decree set the general assessment base for 2002 (CZK 15,711), increased the reduction limits to CZK 7,500 and CZK 19,200, and set the amount of the conversion coefficient for the adjustment of the general assessment base for 2002 (1.0717).
- **Act No. 424/2003 –** effective as of 1 January 2004. The amendment to the law entailed an expansion in the group of insured persons (persons in an employer/employee relationship concluded in accordance with foreign legal regulations, members of the Council for Radio and Television Broadcasting, the financial arbiter, and the deputy financial arbiter).
- **Act No. 425/2003 -** effective as of 1 January 2004. This act led to changes not only in **pension insurance**, but also in social security **premiums** and the contribution to the state employment policy. These are the most significant changes

since 1995, when the current Pension insurance Act was passed (it entered into effect on 1 January 1996).

The **changes in pension insurance** mainly include

a) an **increase in the age limit** for an entitlement to an old-age pension, where the same momentum will be preserved after 2007 in order to progress to a situation where the uniform limit for men and childless women is 63 years. The retirement age for other women will continue to be differentiated based on the number of children they have reared, and will vary between 59 and 62 years accordingly,

b) a **restriction in the possibility of early retirement** by cancelling temporarily reduced early old-age pensions; this possibility will be temporarily preserved (until 31 December 2006) if the conditions set for recipients of partial disability pensions or former recipients of full disability pensions are met. As regards the possibility of granting the other type of premature old-age pension (a permanently reduced pension), the current legislation remains unchanged,

c) a **reduction in the assessment of study periods** for the purposes of pension insurance, whereby periods of study at secondary schools and tertiary educational institutions before 1 January 1996 acquired after reaching the age of 18 years are assessed for a maximum period of six years; this time is considered a compensatory insurance period, and in setting the amount of pensions it is therefore only assessed at 80% (this move unifies the new system with assessments of study periods prior to 31 December 1995). Study periods before 1 January 1996 which are obtained before the student reaches the age of 18 continue to be rated as 'fully fledged' insurance periods,

d) a **cancellation of the condition permitting an entitlement to the payment of an old-age pension in addition to income from gainful employment** in a period of two years as of the emergence of this entitlement to this pension only if a set limit is not exceeded (double the subsistence level for individuals); this applies to employees and the self-employed. At the same time, it was decreed that, for an entitlement to the payment of an old-age pension in addition to income from gainful employment to be valid, the employer/employee relationship must be concluded for a **maximum period of one year**,

e) the **classification of self-employment into primary and secondary employment.** Self-employed persons who are self-employed as their main activity are always (regardless of their income) pension insurance participants (and therefore pay pension insurance premiums and the state employment policy contribution at least on the basis of the minimum possible assessment base). Self-employed persons whose gainful activity is their secondary form of employment in terms of employment income or in terms of the duration of set circumstances (the collection of an old-age or full disability pension, stud-

ies, etc.) continue to be pension insurance participants on the basis of the amount of income achieved,

f) an **expansion in the group of self-employed persons to include persons performing the activity of a mandatory** on the basis of a mandate contract concluded in accordance with the Commercial Code, provided that this activity is carried out outside of a relationship establishing participation in sickness insurance and provided that the mandate contract has not been concluded in the scope of other self-employment.

Changes in social security premiums and the contribution to the state employment policy primarily include the following:

a) the **'transfer' of part of the contributions collected for the state employment policy to the pension insurance system**, such being by raising pension insurance premium rate by two percentage points (from 26% to 28% of the assessment base) and by reducing the premium rate of the state employment policy contribution by two percentage pints (from 3.6% to 1.6% of the assessment base),

b) a **gradual increase in the minimum assessment base for the appointment of premiums for self-employed persons** between 2004 and 2006 from 35% to 50% (to 40% in 2004, to 45% in 2005, and to 50% in 2006) of the difference between the achieved revenues and expenditure. At the same time, between 2004 and 2006 the minimum assessment base set a nominal base for the self-employed whose self-employment is their main gainful activity will increase – to 20% of the average wage in the national economy (expressed as the monthly wage) in 2004, to 22.5% in 2005, and to 25% in 2006.

(B) Preparation of conceptual changes

Based on its policy statement of August 2002, the government inter alia will devote 'prime attention to the modernization of the pension system, which, besides changes in benefits, will also ensure the necessary development of the insurance carrier. In the field of pension insurance, the government will prepare legislation for the next stage of pension insurance reform. The basis of the system will remain general, uniform, PAYGO pension insurance guaranteed by the state, whereby changes will be made to ensure long-term stability. In this respect, the relation between the amount of pension and the premiums paid will be emphasized. The government will promote the development of private capital forms of voluntary supplementary insurance so that this can become a fully functional part of the pension system; the government will ensure the separation of the assets of participants from the assets of companies managing these resources. The government will submit a proposal for the introduction of employee pension plans, with the participation of the representatives of employers and employees in the management thereof, and with the a non-profit form of organization; the government will regulate the rules for the provision of employer contributions in favour of various forms of supplementary systems.'

In the scope of public budget reform, parametric changes to the current system were made to stabilize the pension system for approximately ten years and create conditions for the further continuation of pension reform. One of the conclusions accepted in the scope of public budget reform was a decision that the 'basis of the reform of the first pillar of pension insurance will be the preparation for conversion from a defined benefit system to a defined contribution system of old-age pensions', whereby 'in this respect, changes in supplementary systems shall be assessed'. It was decided that the Ministry of Labour and Social Affairs would be responsible for a compulsory basic system of pension insurance and that a group managed by the Ministry of Finance would work on supplementary systems. In June 2003, the Minister of Labour and Social Affairs was set the task of drawing up a draft of new legislation on pension insurance, in accordance with the conclusions of the first stage of public budget reform; this legislation is planned to enter into effect as of 1 January 2008.

On this basis, a document was produced called 'Proposal of the Main principles for the Continuation of Pension System Reform', the aim of which was to provide a specific basis for discussion by all parliamentary parties and social partners regarding the path to be taken in pension reform, including a draft schedule of other tasks, with the aim of reaching a consensus on the nature of fundamental pension reform. In December 2003, this document was presented to the government. The government suspended its discussion of the document on 7 January 2004, with the requirement that adjustments be made. The amended material was presented to the government in January 2004. The government than adopted a resolution prepared by the Czech Government Office approving the 'Principal Goals of Pension Reform', as detailed in the schedule to the resolution, and tasked the Prime Minister, in cooperation with the Minister of Labour and Social Affairs, to discuss the approved principal goals with the chairpersons of the parliamentary parties, with the aim of reaching a consensus, by 1 May 2004.

In accordance with this government resolution, political talks are in progress. In March 2004, the chairpersons of the parliamentary parties reached an agreement in the issue of the process of preparing pension reform and the appointment of a team of experts comprising representatives of the parliamentary parties, a representative of the Prime Minister, the Deputy Prime Minister and Minister of Finance, and the Minister of Labour and Social Affairs. The task of the team of experts is to cover the organization of the process of pension reform. On 23 June 2004, the government adopted a resolution of the organization required for the preparation of the supporting documents intended to aid decisions on pension reform; the position of 'document preparation coordinator' was set up to manage

the activities of a working group whose members were appointed by parliamentary political parties.[7] The aim of the working group is to quantify the different variants of pension reform selected by the team of experts.

Following the resignation of the government appointed in 2002 and the formation of a new government in August 2004, this new government adopted a new policy statement. Under this policy statement of August 2004, the government presented the Chamber of Deputies with a proposal for the reform of the 'pension system, the basis of which will continue to be general, uniform, pay-as-you-go pension insurance guaranteed by the state, based on inter-generational and income solidarity, where the amount of a pension will be derived to a greater extent on previous earnings and premiums paid, granted pensions will be valorized so that current pensioners can share in the increasing wealth of society, an account will be created for state pension reserves in order to implement pension reform, the further development of private capital forms of voluntary pension plans will be promoted so that these pension plans become a fully functioning part of the pension system, with elements of employee pension schemes'.

A.2.2. SICKNESS INSURANCE

(A) Legislative changes which have entered into force

- **Act No. 420/2002** – effective as of 1 January 2003. It was stated that as of 1 January 2003 the reduction limits of earnings decisive for the calculation of sickness insurance benefits would not be increased.
- Act No. 421/2003 – effective as of 1 January 2004. The main changes involved:
  a) an extension in the decisive period used as the basis to determine the daily assessment base for the setting of sickness insurance benefits, i.e. from the calendar quarter to twelve calendar months,
  b) a reduction in the daily assessment base for the calculation of sickness benefits and benefit for caring for a family member over the first 14 calendar days of sick leave (quarantine) or the need for treatment, i.e. from the current 100% to 90% in the case of an amount up to CZK 480 (the first reduction limit),
  c) a reduction in sickness benefit for the first three calendar days of sick leave from 50% to 25%,
  d) an extension in the period over which reduction limits for the daily assessment base will not be raised, i.e. to include 2004 and 2005; this measure will also apply in the system of sickness welfare in the armed forces,

[7] Members of the working subgroup include experts from the Ministry of Labour and Social Affairs and the Ministry of Finance.

  e) an extension in the group of insured persons (persons in an employer/employee relationship concluded in accordance with foreign legal regulations, members of the Council for Radio and Television Broadcasting, the financial arbiter, and the deputy financial arbiter).

(B) Preparation of conceptual changes

In accordance with the government policy statement of August 2002, the Ministry of Labour and Social Affairs prepared the draft general principle of a new Sickness insurance Act, which was presented to the government in September 2003. The government suspended its discussion on the draft general principle in November 2003. The government re-discussed and approved this draft in February 2004, with the instruction that the Sickness insurance Bill should be presented to the government by 30 September 2004. At the same time, the government ordered that, before the submission of the bill, the variant solutions for certain problems connected with the new Sickness insurance Bill should be presented to the government for a decision. This was the basis for the preparation of a document entitled 'Proposed solutions for certain problems connected with the preparation of a law on sickness insurance', which the government discussed on 16 June 2004; the government decided on the variants of the proposed solutions under Resolution No. 604/2004.

Key principles of the proposed system of sickness insurance:

- the securing of economically active citizens with short-term monetary benefits in selected short-term situations,
- system uniformity, with participation compulsory for employees and voluntary for the self-employed,
- solidarity between persons with higher and lower incomes will the restricted (a reinforcement in the insurance elements),
- solidarity between employers will be restricted by the partial (gradual) privatization of the system,
- the protective elements of the system will be reinforced to prevent system abuse,
- revenues from premiums and expenditure on benefits will essentially be even,
- employers will contribute to the financial security of employees at times of sick leave,
- the system will respect international obligations.

The most important changes compared with the current system are as follows:

- the involvement of employers in the development of temporary incapacity to work, whereby they will be required to pay a wage compensation for the first 14 days of sick leave,
- an increase in the involvement of doctors in the development of temporary

incapacity to work, with the appointment of obligations which must be respected and the imposition of penalties for non-Fulfillment,

- a restriction in solidarity between low- and high-income brackets and solidarity between employers.

PART B

EVALUATION OF THE BASIC INDICATORS OF SOCIAL INSURANCE DEVELOPMENT

B.1. PARAMETERS INFLUENCING THE DEVELOPMENT OF SOCIAL INSURANCE

Developments in social insurance are mainly affected by the following parameters:

- Economics (developments in the gross domestic product, prices, and wages)
- Demographics (developments in the age structure of the population, determined primarily by fertility, life expectancy, and migration),
- Employment (developments in economic activity and unemployment).

B.1.1. ECONOMIC DEVELOPMENT

In 2002, there was a significant slowdown in economic growth, caused primarily by economic stagnation in EU Member States and the destructive floods of August 2002. The last estimate by the Ministry of Finance for 2003 indicated a rise in the gross domestic product by 2.9% in the constant prices of 1995.

Table 2. Developments in GDP

Year	GDP	Annual rise in constant prices	Standard per capita (converted using current purchasing power parity)	
	[CZK bn]	[%]	[USD]	EU 15 = 100
1999	1,902	0.5	13,100	56
2000	1,985	3.3	13,700[1]	56[1]
2001	2,175[1]	3.1[1]	14,800[1]	58[1]
2002	2,276[1]	2.0[1]	15,100[1]	58[1]
2003	2,405[2]	2.9[2]	15,800[2]	59[2]

Source: Ministry of Finance of the Czech Republic.
Notes: [1] Preliminary. [2] Estimate.

In 2002, the inflation rate dipped to 1.8% (down from 4.7% in 2001). In 2003 (for the first time since 1990) there was a year-on-year fall in prices. The average inflation rate in 2003 was therefore at its lowest level since 1987 (0.1%). The keen competitive environment on the domestic market was a particularly strong element working against a faster rise in prices.

The nominal value of the average gross wage in the national economy went up year on year by 7.3% in 2002 and 6.7% in 2003. However, considering the above-mentioned price rise, the **real value of the average gross wage in the national economy** in 2002 climbed by 5.4% compared with 2001; the corresponding figure in the 2002/2003 comparison was as much as 6.6%. The rise in real wages was therefore much higher than the increase in real GDP in these years.

Table 3. Average nominal wage in the national economy

Year	Wage [CZK per month]		Wage development Previous year=100%	
	gross	net	gross	net
1999	12 655	9 842	108,2	108,3
2000	13 490	10 447	106,6	106,1
2001	14 640	11 324	108,5	108,4
2002	15 711	12 082	107,3	106,7
2003	16 764	12 822	106,7	106,1

Source: Czech Statistical Office, Ministry of Labour and Social Affairs.
Note: The average net wage is the average gross wage less the income tax applicable to this wage and the corresponding health and social insurance premiums.

B.1.2. DEMOGRAPHIC DEVELOPMENT

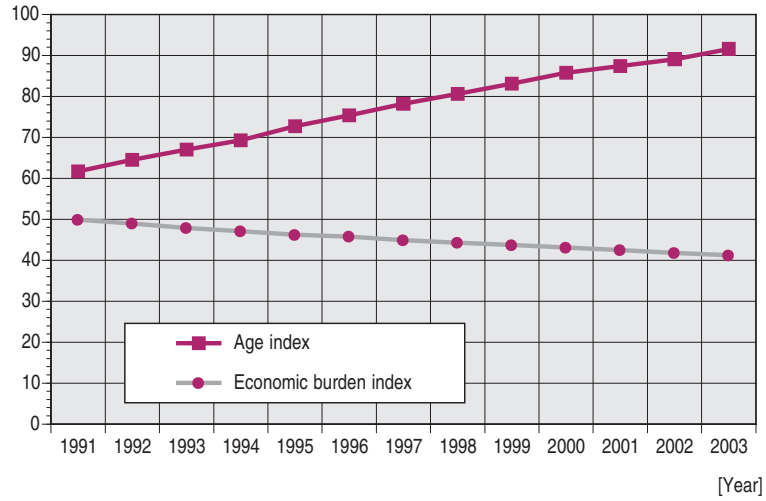
The relative share of the eldest generation rose slightly throughout the 1990s; this development contrasted with the diminishing share of children in the population. In 2000, the proportion of inhabitants aged 65 or more years old was the highest ever. After 2000, this share stagnated and the absolute number of elderly people fell slightly.

Table 4. Age structure of the population

Year	Age group						
	0-14 let years old		15-64 let years old		65 or more years		Total
	[thousands]	[% of population]	[thousands]	[% of population]	[thousands]	[% of population]	[thousands]
1999	1,707	16.6	7,153	69.6	1,418	13.8	10,278
2000	1,664	16.2	7,179	69.9	1,423	13.9	10,266
2001	1,622	15.9	7,170	70.2	1,415	13.9	10,207
2002	1,590	15.6	7,196	70.5	1,418	13.9	10,204
2003	1,554	15.2	7,234	70.8	1,423	13.9	10,211

Source: Czech Statistical Office.

Graph 1. Age index and the economic burden index[8]



Source: Czech Statistical Office.

Demographic developments after 1990 were generally positive, even though the share of persons aged 65 or over increased and the population grew older. However, the economic burden index8 steadily declined in this period, from 50 in 1991 to 41.8 in 2002. The general demographic structure is influenced in particular by low fertility and the lengthening life expectancy. The life expectancy on birth in the period 1999-2003 increased among men by 0.6 years (among women by 0.4 years); on reaching the age of 60 the increased life expectancy is by 0.3 years for both men and women, on reaching the age of 65 the figure is just 0.2 years for both men and women (between 1990 and 2003, life expectancy on birth increased by 4.5 years among men and 2.5 years among women; on reaching the age of 60 the figure was 2.6 years for men and 2.2 years for women, and on reaching the age of 65, the figure was just 2.2 years for men and 1.9 years for women).

[8] Age index = the share of persons aged 65 or more per 100 persons aged 0-14 years old.
Economic burden index = the share of persons aged 0-14 and 65+ per 100 persons aged 15-64 years old.

Table 5. Fertility, life expectancy

Year	Fertility	Fertility, life expectancy [number of years] At birth		At 60 years old		At 65 years old	
		men	women	men	women	men	women
1999	1.13	71.4	78.1	16.9	21.0	13.6	16.9
2000	1.14	71.7	78.4	17.0	21.2	13.7	17.1
2001	1.15	72.1	78.4	17.3	21.2	14.0	17.1
2002	1.17	72.1	78.5	17.3	21.3	13.9	17.2
2003	-	72.0	78.5	17.2	21.3	13.8	17.1

Source: Czech Statistical Office.

The population of the Czech Republic at the turn of the century is older than ever before. The same can be said of the population in other European countries, but in the Czech Republic the prospects of further aging of the population are more evident than in most of these other countries.

The impact of foreign migration on the structure and size of the Czech Republic's population is negligible.

B.1.3. EMPLOYMENT DEVELOPMENT

An important problem of employment in the Czech Republic is the fact that the population is growing older, and this process has so far been manifested in a rise in the number of persons of an economically active age. However, this trend is countered quite significantly by the falling rate of economic activity,[9] which has steadily gone down since 1999 to just under 69% for men and less than 51% for women. A positive change has occurred among the higher age groups, where the level of economic activity has started rising since 2000, especially as a consequence of the increased age limit for an entitlement to an old-age pension (Table 6). In connection with this, it is necessary to mention the European Councils in Lisbon (2000) and Stockholm (2001), where, in the scope of the new EU strategy for 2000-2010, the goal was set of taking the overall employment rate[10] up to 70% by 2010, with an employment rate of 60% among women and an employment rate among older persons (55-64 years) of 50%. The respective values of these indicators for the Czech Republic (based on Eurostat methodology) in 2003 were (in the same order as that above) 65.2%, 56.5%, and 41.2%; unlike the first two values, which have had a slight downward trajectory over the past five years, the last value (the employment rate among older persons) has a rising trend.

[9] The rate of economic activity among persons of a particular age group is equal to the number of active persons in this group (employed + unemployed) divided by the number of all persons in this group. The total rate of economic activity, according to the methodology of the Czech Statistical Office (the source of this table), is related to the group of all persons older than 15, while according to Eurostat methodology it is only related to the group of 15-64 years old.

[10] The overall unemployment rate is defined by Eurostat as the number of employed persons expressed as a percentage of the populated aged 15-64.

Table 6. Level of economic activity

Year	55-59 years old	60-64 years old	55-64 years old	Total		
				total	men	women
1999	54.1	19.9	39.4	61.0	70.6	52.1
2000	53.3	17.7	38.2	60.4	69.8	51.6
2001	54.3	18.2	39.0	60.0	69.4	51.3
2002	57.9	20.9	42.4	59.8	69.4	51.0
2003	60.4	21.9	44.2	59.4	68.7	50.8

Source: Czech Statistical Office.

Since 2001, the rate of registered unemployment has gradually gone up from 8.5% in 2001 to 9.9% in 2003. However, there is considerable disparity in the different regions. In contrast, the **unemployment rate based on a sample survey of the workforce gradually fell** as of 2000, until it reached level of 7.3% in 2002. **In 2003, this figure climbed** to 7.8%.

B.2. SOCIAL INSURANCE INDICATORS

B.2.1 PREMIUMS

Revenues from social security premiums and state employment policy contributions account for almost 40% of all central government budget income and cover approximately 90% of all social transfers paid out of the central government budget. In this respect, the Ministry of Labour and Social Affairs is not merely a 'consumer' of state revenues, but also makes a major contribution to the income side of the central government budget.

Developments in social insurance revenues are mainly influenced by the **number and composition of contributors** (and therefore by developments in unemployment) and the **average payment being made per insured person**. Both these indicators are predetermined by demographic and socio-economic developments. Another factor influencing the amount of payments is the **collection rate**.

The **number of contributors** has a long-term falling trend, with a slight rise in the number of insured persons registered only in 2001-2002. In 2002, the number of contributors went up by 15,000 year on year, but in 2003 there was another de-

cline (by 43,000 people). The main reason for the fall in the number of insured persons, besides rising unemployment (the average unemployment rate rose from 9.15% in 2002 to 9.90% in 2003), is the hike in the number of new pensions awarded. The ongoing restructuring of industry has a long-term impact on the gradual rise in the number of employees in small organizations and on the falling number of employees in organizations with more than 25 employees. The number of self-employed persons is also on the rise; in 2003, 646,000 people paid deposits on pension insurance, 15,000 up on 2002. The share of the self-employed in the number of insured persons is slowly rising (to 13.6% in 2002 and 13.8% in 2003).

Table 7. Number and composition of insured persons

Year	total	Employees of organizations	of small organizations	Self--employed	Total
			Numbers [thousands of persons]		
1999	4,117	3,234	883	610	4,727
2000	4,016	3,169	847	619	4,635
2001	4,066	3,177	889	628	4,694
2002	4,068	3,157	911	641	4,709
2003	4,020	3,084	936	646	4,666
			Shares in the total number of contributors [%]		
1999	87.1	68.4	18.7	12.9	100.0
2000	86.6	68.4	18.3	13.4	100.0
2001	86.6	67.7	18.9	13.4	100.0
2002	86.4	67.0	19.3	13.6	100.0
2003	86.2	66.1	20.1	13.8	100.0

Source: CSSZ.

The average payment per insured person is affected by developments in the income of insured persons and whether insured persons achieve this income as employees or as self-employed persons. The average assessment base for premium payments (Table 8) was reliably lower than the wage in the national economy, by CZK 1,452 in 2003 and by CZK 1,326 in 2002. In the period 2001-2003, the year-on-year rise in the assessment base of employees and the self-employed was always lower than the year-on-year rise in the average wage in the national economy; an exception was the increase in the assessment base of the self-employed in 2002, which was 1.2 points higher than the rise in the average wage. In 2003, the average assessment base of the employees of organizations and small organizations, which was used as the basis for premium payments, amounted to CZK 15,334, i.e. CZK 949 (6.6%) more than in 2002. In 2002, the assessment base of employees was CZK 14,385, up 6.8% on 2001. In 2003, self-employed persons paid premiums on average from an assessment base of CZK 4,300, which is 6.1% higher than in

2002, when the assessment base was CZK 4,052. Because of the method used to set the assessment base of the self-employed, the average amount of their assessment base was just 28% of the average assessment base for employees. Therefore, taking into account the solidarity contained in the structure of the amounts of benefits, the benefits of the self-employed are heavily subsidized out of the premiums paid by employees. If the self-employed were to pay premiums from the same average assessment base as employees, the annual income from premiums would be approximately CZK 20 billion higher; this is a sum roughly corresponding to the deficit of the pension account.

The rise in assessment bases, out of which premiums were paid, together with a change in the number of contributors, resulted in a year-on-year rise in the volume of premiums by 5.5% in 2003 and 6.6% in 2002.

Table 8. Average assessment base for premiums

	1999	2000	2001	2002	2003
Average assessment base of employees [CZK per month]					
- employees of organizations	12,270	13,023	13,992	15,059	16,171
- employees of small organizations	10,104	11,138	11,616	12,051	12,553
- total employees	**11,805**	**12,625**	**13,472**	**14,385**	**15,334**
- self-employed with pension insurance	3,461	3,557	3,735	4,052	4,300
- total self-employed with pension insurance/employees [%]	29.3	28.2	27.7	28.2	28.0
Average wage in national economy [CZK per month]	**12,655**	**13,490**	**14,642**	**15,711**	**16,764**
Difference between average assessment base of employees and average wage in national economy [CZK per month]	-850	-865	-1,170	-1,326	-1,430
Share of average assessment base of employees and average wage in national economy [%]	93.3	93.6	92.0	91.6	91.5

Source: CSSZ, Ministry of Labour and Social Affairs.

Developments in the low assessment base among the self-employed have resulted in a situation where the share of the assessment base for premium payments (employees and the self-employed) in the average wage of employees in the national economy is falling. In 2000, this share was 85%; in 2003 it was only 82%.

A **maximum assessment base for social security premiums** is set only for the self-employed (currently CZK 486,000 per year). The fact that there is no such maximum base for employees means that, among employees paying high contributions to the system, there is substantial disparity between the contributions paid and the benefits granted, and the employer costs for such employees are very high. The introduction of a maximum assessment base would cut central government budget income from social security premiums and the state employment policy contribution. If a maximum assessment base were set at three or four times the average wage in the national economy, revenues from pension and sickness insur-

ance premiums would go down by approximately CZK 8.7 billion and CZK 5 billion respectively in 2006. On the other hand, the revenues from income tax would go up, so the overall reduction in national budget income would be partially eliminated. If, in the scope of a uniform approach to setting premiums, a maximum assessment base were also introduced in the public healthcare system, the overall reduction in national budget income could be estimated at CZK 6.9 billion in the case of three times' the average wage, and CZK 4 billion in the case of four times' the average income.

The collection of premiums in relation to prescribed premiums (the collection rate) has a significantly improving tendency.

In the national budget for 2003, it was set that the income from social security premiums and the state employment policy premium, including adjustments on premiums, fines, and penalties would be CZK 266.6 billion. The final state account stipulates that revenues from premiums, including fines, penalties, and adjustments, actually came to CZK 263.5 billion; therefore the budget was fulfilled to 98.8%. The actual comparison of the Fulfillment of budgeted income does not offer an objective overview of the premium collection rate.[11]

A more objective indicator is a comparison of the prescribed payment duties of contributors and the Fulfillment thereof:[12]

- In 2003, the ratio of premium payments to prescribed premiums (not including fines, penalties, and premium adjustments) came to 100.0%; in 2002 the figure was 100.3%. The fact that the claims are lower than payments is caused by the transfer of prescribed premiums to irrecoverable receivables and can also be pout down to the method used to keep account of recovered old claims.
- The share of total payments in relation to total prescriptions (premiums including fines and penalties) came to 99.4% in 2003 and 99.6% in 2002, having risen by almost 1.2 percentage points in comparison with 2001. The value of 99.6% was the highest for any period recovered since 1993, the year in which social security pensions were first collected.

In 2003, total payments (collection) of premiums, including faces, penalties and adjustments came to CZK 264.2 billion. Of this amount, CZK 202.8 billion was the pension insurance, with CZK 33.3 billion for sickness insurance, CZK 28.1 billion in contributions to the state employment policy. The collection of premiums (less

[11] The volume of premiums is set by the National Budget Act and the results of Fulfillment depend in large measure on whether the budget has been prepared on the basis of real parameters.

[12] The share of total payments in the aggregate prescribed premiums has no link to the Fulfillment of budget income, an increase in revenues from which the premiums are paid, the number of premium payers, etc. Only the payment discipline of contributors affects this indicator.

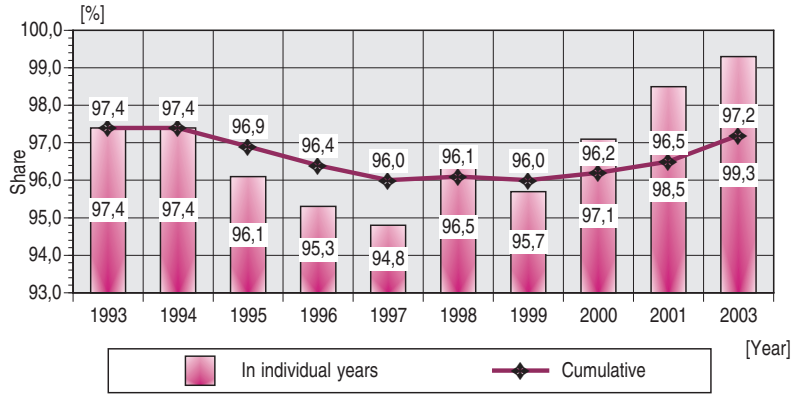
fines and penalties) amounted to CZK 262.1 billion. Total prescriptions, including fines and penalties, in all three areas came to CZK 265.9 billion; premium prescriptions less fines and penalties were CZK 262.2 billion.

Table 9. Comparison of billing and payments from 1999 to 2003

Year	Premiums including fines and penalties			Premiums less fines and penalties		
	Billing [CZK bn]	Collection [CZK bn]	Collection rate [%]	Billing [CZK bn]	Collection [CZK bn]	Collection rate [%]
1999	213.8	204.6	95.7	207.5	201.6	97.1
2000	222.2	215.7	97.1	216.4	213.0	98.4
2001	238.7	234.8	98.4	233.7	232.2	99.4
2002	251.3	250.3	99.6	248.6	249.2	100.3
2003	265.9	264.2	99.4	262.2	262.1	100.0

Source: CSSZ.

Graph 2. Developments in the share of payments and billing (including penalties, fines, and additional premiums)



Source: CSSZ.

A comparison of year-on-year indices in the growth of prescriptions and collections reveals that until 2002 the year-on-year index of collection growth was higher than the index of the growth in prescriptions, which translates into a success rate of more than 100%. From this aspect, we might say that recoverable claims from the past have already been recovered and that the overall future success rate is settled under 100% (the value of real annual collection). However, for future evaluations of the collection rate in a given year, it will be necessary to make the overall collection rate objective by purging it of bad debts.

The collection rate is affected by the specific features of regions, economic

power, and the payment discipline of debtors. The collection rate can be influenced in particular by the timely issue of bills of arrears and inspection activities. For each payer, a comprehensive inspection is conducted at least once every two years; it is necessary to track the payer's account and not permit debt to build up to the extent that it becomes unmanageable for the payer.

In 2003, the collection rate was influenced by the impact of the floods from August 2002; some entities found themselves insolvent and were gradually wound up.

Premium collection can be assessed, from the aspect of international experience, as very good. The collection rate is comparable with the developed countries in Europe.

In the period from January 1993[13] until December 2003, the total premiums prescribed (including fines and penalties) amounted to CZK 2,166.7 billion. The amount of arrears (including fines and penalties) in the same period was CZK 63.75 billion. This means that the amount of debt is approximately 2.9% of the total premiums written. In 2003, receivables went up by CZK 2.0 billion compared with the previous year. The increase in receivables in 2002 (by CZK 1.1 billion) was the lowest in the whole period since 1993 (Graph 3). The share of premium arrears in relation to GDP was the lowest in 2003 of any year in the monitored period, amounting to 0.26% (the highest rise in value was recorded in 1977).

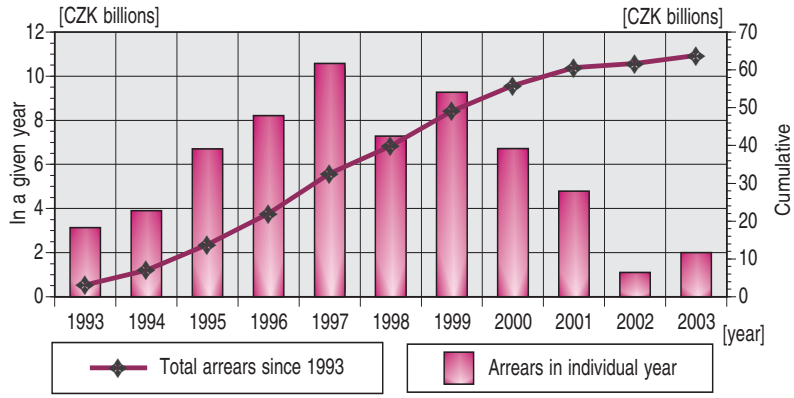
Enduring growth has been recorded by receivables from deregistered premium payers, from the aspect of absolute terms and as regards the size of the share in overall debt. As at 31 December 2003, receivables due from deregistered entities amounted to CZK 32.6 billion (51% of total receivables), receivables due from current payers amount to CZK 29.4 billion (46% of all receivables), and receivables in permitted amounts came to CZK 1.8 billion in permitted amounts (3% of the total).

Structure of receivables from premium payers

The of receivables in relation to deregistered entities in the whole of receivables; the overall value of receivables has been gradually waning, while the rise in the share of receivables from current payers has resulted in a situation where the share of receivables in relation to current writers has been increasing in both absolute and relative terms.

[13] 1 January 1993 was the date that Act No. 589/1992, on social security premiums and the state employment policy contribution, entered into effect.

Graph 3. Developments in arrears



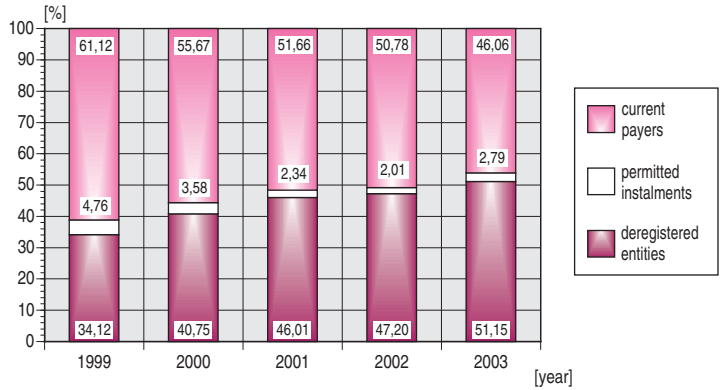
Source: CSSZ

Table 10. Structure of receivables from premium payers (CZK millions)

Receivables as at 31 December	1999	2000	2001	2002	2003
Total	49,127	55,850	60,638	61,749	63,754
In relation to deregistered entities	16,764	22,761	27,897	29,147	32,609
In permitted instalments	2,337	2,000	1,417	1,243	1,780
In relation to current payers	30,026	31,089	31,324	31,359	29,365

Source: CSSZ

Graph 4. Structure of receivables from premium payers as a percentage of total receivables (situation as at 31 December)



B.2.2. PENSION INSURANCE

The basic compulsory pension insurance is based on the pay-as-you-go method, i.e. collected premiums are immediately used for benefit payments. Finances are not accumulated with the aim of investment.

Equalized financial balances in PAYGO systems can be achieved if the revenues are the same as expenditure, i.e. the following equation applies

$$PP \times M \times (V/M) \times PS \times ÚV \times (1 - PV) = PD \times D, \quad [1]$$

where PP indicates the number of contributors, M the average wage in the national economy, V the average assessment base for premium collection, PS the contribution rate, ÚV the premium collection rate, PV the operating expenditure expressed as a share in total income, PD the number of pensioners, D the average amount of the pension. By adjusting equation [1] we obtain an equation for the main parameters of an even financial balance: a contribution rate, compensatory ratio (the relation between the average pension and the average wage in the national economy), and a relationship between the number of insured persons and the number of pensioners

$$PS \times (V/M) \times ÚV \times (1 - PV) = D/M \times PD/PP. \quad [2]$$

Developments in the number of premium payers (including problems connected with developments in the their structure from the aspect of the amount of premiums), developments in the average assessment base for the collection of premiums and the ratio thereof to developments in the average wage in the national economy, and the premium collection rate are discussed in Chapter B.2.1., covering both pension and sickness insurance. In this part, we will mainly assess pension insurance expenditure and the causes behind the development of such expenditure. We will concentrate on the relationships between income and expenditure, the development in the number of pensioners and pensions, the amount of pensions, and the differentiation thereof.

B.2.2.1. Revenues and expenditure

In 2002, expenditure on pensions outstripped revenues by CZK 16 billion; in 2003, the same figure was CZK 17.5 billion.

Table 11. Pension insurance income and expenditure
(Chapter 313 - Civil Sector)

Year	Income[1] [CZK bn]	Expenditure[2] [CZK bn]	Revenues - - Expenditure [CZK bn]	Expenditure [% GDP]
1999	157.0	173.4	-16.4	9.1
2000	165.5	182.2	-16.7	9.2
2001	180.2	196.1	-15.9	9.0
2002	192.2	208.3	-16.1	9.2
2003	202.8	220.3	-17.5	9.2

Source: National Closing Accounts 1996–2001.

Notes [1] Including fines, penalties, premium adjustments, voluntary supplementary insurance.

[2] Including a deposit provided in the previous year and provided for the subsequent year, exclusive of the deposit, without operating expenditure.

The highest share pension insurance expenditure is taken up by old-age pension expenditure. This is because, of the total number of pensioners, most are old age pensioners and the level of this type of pension is the highest of all the different types of pensions.

Table 12. Expenditure on pensions by type of pension[1]
(Chapter 313 - Civil Sector)

Year	Old age	Pension Full disability	Pension Partial disability	Widow	Widower	Orphan	Total
			Expenditure [CZK bn]				
1999	123.7	25.6	6.7	14.3	1.9	1.0	173.0
2000	130.9	26.4	7.0	14.5	2.0	1.1	181.9
2001	140.7	28.0	7.7	15.9	2.4	1.2	195.8
2002	150.8	30.2	8.5	17.1	2.5	1.4	210.4
2003	156.3	31.5	9.1	17.3	2.5	1.5	218.3
			Expenditure [% of total]				
1999	71.5	14.8	3.9	8.3	1.1	0.6	100.00
2000	72.0	14.5	3.9	8.0	1.1	0.6	100.00
2001	71.8	14.3	3.9	8.1	1.2	0.6	100.00
2002	71.7	14.4	4.0	8.1	1.2	0.7	100.00
2003	71.6	14.5	4.2	8.0	1.2	0.7	100.00

Source: CSSZ.

Note: [1] Net expenditure excluding deposits to post offices for pension payments.

The basic parameters which influence pension insurance expenditure are the number of pensioners, or pensions, and the amount of these pensions.

B.2.2.2. Number of pensioners and pensions

The total number of pensioners in 2002 fell slightly compared with 2001, mainly because there was a fall in the number of old-age pensioners awarded a pension on retirement or a temporarily reduced early old-age pension. In 2002-2003, the growth in the number of disability pensioners (full and partial) also continued. There was also continued growth in the number of pensioners with permanently reduced early old-age pensions, although this growth has slowed in the past two years following the increased reduction for early retirement in 2001. In 2003, the number of pensioners increased to the extent that it was higher than in 2001. The main cause is the doubling number of pensioners with temporarily reduced old-age pensions, as a result of a legal cancellation of this pension as of 1 January 2004, and not least rising unemployment. **In 2002–2003, the growth trend in the whole number of pensioners continued, despite a fall in the number of old-age pensions awarded at the age limit.**

Table 13. Number of pensions[1] by type of pension (as at 31 December)

Year	Type of pension: Old-age total	Old-age not reduced[2]	Old-age reduced permanently[3]	Old-age reduced temporarily[4]	Proportionate old-age[5]	Disability full	Disability partial	Widow and widower	Orphan[6]	TOTAL
					TOTAL					
1999	1,849,739	1,721,213	110,885	17,641	30,144	381,542	146,266	83,183	57,285	2,548,159
2000	1,878,555	1,702,846	156,420	19,289	28,204	377,679	150,609	77,545	55,273	2,567,865
2001	1,896,496	1,681,223	199,529	15,744	26,277	376,455	157,832	72,996	53,958	2,584,014
2002	1,883,314	1,659,163	210,960	13,191	24,516	378,433	166,405	70,729	54,401	2,577,798
2003	1,891,577	1,639,500	225,933	26,144	22,642	380,416	173,569	67,438	55,202	2,590,844
					MEN					
1999	650,189	597,884	44,310	7,995	831	188,746	82,587	6,817	27,180	956,350
2000	658,489	588,539	61,390	8,560	891	187,370	84,787	6,664	26,249	964,450
2001	664,092	579,347	77,807	6,938	957	187,258	88,696	6,708	25,409	973,120
2002	656,217	568,327	82,034	5,856	1,057	188,680	92,891	7,255	25,339	971,439
2003	657,771	559,274	87,433	11,064	1,146	190,456	96,562	7,532,	25,453	978,920
					WOMEN					
1999	1,199,550	1,123,329	„66,575	9,646	29,313	192,796	63,679	76,366	30,105	1,591,809
2000	1,220,066	1,114,307	95,030	10,729	27,313	190,309	65,822	70,881	29,024	1,603,415
2001	1,232,404	1,101,876	121,722	8,806	25,320	189,197	69,136	66,288	28,549	1,610,894
2002	1,227,097	1,090,836	128,926	7,335	23,459	189,753	73,514	63,474	29,062	1,606,359
2003	1,233,806	1,080,226	138,500	15,080	21,496	189,960	77,007	59,906	29,749	1,611,924

Source: CSSZ.

Note: [1] Not including pensions paid abroad.

[2] Not reduced = old-age pension on reaching retirement age.

[3] Permanently reduced: old-age pension granted up to 3 years before the age limit in accordance with Section 31 of Act No. 155/1995.

[4] Temporarily reduced: old-age pension granted up to 2 years before the age limit in accordance with Section 30 of Act No. 155/1995.

[5] Relative old age: old age pensions granted in accordance with Section 26 of Act No. 100/88 Sb and in accordance with Section 29(b) of Act No. 155/95 (short insurance period).

[6] Only pensions paid separately.

Table 14. Average age of pensioners (as at 31 December)

Year	Old-age	Relative old-age	Full disability	Partial disability	Widow - solo	Widower combined	Orphan	Total
				Pension				
				Men - average age				
1999	69	73	55	47	48	74	15	63
2000	69	72	55	48	49	74	15	63
2001	69	72	55	48	49	74	15	63
2002	69	72	55	48	50	75	15	63
2003	69	71	55	49	50	75	15	63
				Women - average age				
1999	65	73	53	45	62	73	16	65
2000	65	74	54	46	61	73	16	65
2001	65	74	54	46	61	73	16	65
2002	65	75	54	46	60	73	16	65
2003	65	75	54	46	60	73	16	65

Source: CSSZ

The average age of pensioners in 2002 and 2003 did not change much. The average age of recipients of widow pensions granted separately fell comparing to year 2001 by a year, because older women these days tend to be entitled to their own direct (old-age or disability) pension, which is then paid in combination with the widow pension, and an independent widow pension is increasingly granted solely to younger women who do not yet have a claim to a direct pension.

Table 15. Share of the number of pensioners and number of insured persons

Year	Number of insured persons [thousands]	Number of pensioners [thousands]	Share of the number of pensioners in the number of insured persons [%]
1999	4,727	2,548	53.9
2000	4,635	2,568	55.4
2001	4,694	2,584	55.0
2002	4,709	2,578	54.7
2003	4,666	2,591	55.5

Source: CSSZ.

One of the key indicators decisive for an even financial balance of pension insurance – the **ratio of the number of pensions to the number of contributors** – is developing unfavourably. While the number of pensioners is rising, the number of people paying into the system is going down. The result is that the share of pensioners and the number of insured persons is rising. Considering the above-mentioned fall in the number of pensioners in 2002, this share went down temporarily, but then in the next year (2003) it recorded its highest value since 1999.

Under the law, one pensioner may collect more than one type of pension. A combination of a direct pension (old age, full disability, partial disability) with a survivor's pension (widow, widower, or orphan) is possible. The number of pensions paid is then higher than the number of pensioners. The following equation applies:

$$PD = PDU - V_{concurrence} - Si_{concurrence} \quad , \qquad [3]$$

where PD is the number of pensioners, PDU is the number of pensions, $V_{concurrence}$ is the number of widow and widower pensions paid concurrently with a direct pension, and $Si_{concurrence}$ is the number of orphan pensions paid concurrently with a direct pension.

The **number of pensions paid** in 2002 fell compared with 2001, mainly as a result of the fall in the number of old-age pensions being paid. This temporary fall in 2002, as in the case of the number of pensioners, was replaced in 2003 by an increase in the number of pensions paid by 0.4%; this average exceeds the rise in partial disability pensions (by more than 4%). The representation of individual types of pensions in these years did not change significantly. There was a slight increase in the representation of partial disability pensions.

A very minor part of pensions is paid out abroad. The share of such payments abroad in all paid pensions is rising slightly; in 2003 this share amounted to one per cent of all pensions paid.

Table 16. Number of pensions granted

Year [December]	Pension: Old-age full	Old-age relative	Disability full	Disability partial	Widow	Widower	Orphan	Total
				(a) absolute terms				
1999	1,849,739	30,144	381,542	146,266	619,113	74,858	57,285	3,158,947
2000	1,878,555	28,204	377,679	150,609	614,534	78,575	55,273	3,183,429
2001	1,896,496	26,277	376,455	157,832	610,482	81,715	53,958	3,203,215
2002	1,883,314	24,516	378,433	166,405	608,003	84,677	54,401	3,199,749
2003	1,891,577	22,642	380,416	173,569	602,861	86,219	55,202	3,212,486
				(b) relative terms [% of total]				
1999	58.6	1.0	12.1	4.6	19.6	2.4	1.8	100.0
2000	59.0	0.9	11.9	4.7	19.3	2.5	1.7	100.0
2001	59.2	0.8	11.8	4.9	19.1	2.6	1.7	100.0
2002	58.9	0.8	11.8	5.2	19.0	2.6	1.7	100.0
2003	58.9	0.7	11.8	5.4	18.8	2.7	1.7	100.0

Source: CSSZ.

The group of pensions being paid out at the end of the year T (PDU(T)) is composed of the group of pensions paid out at the end of the year T-1 (PDU(T-1)) after deducting the number of pensions terminated in the year T (PZDU(T)) and the group of new pensions granted in the year T (PNDU(T)). The following equation applies:

$$PDU\ (T) = PDU(T\text{-}1) - PZDU(T) + PNDU\ (T). \qquad [4]$$

Developments in the number of pensions paid out in 2002 and 2003 were significantly influenced by developments in the **number of new pensions granted**, which fell **in 2002** by 12% compared with 2001. This decline was caused by a reduction in the number of newly granted early permanently reduced old-age pensions (by 71%); the results of the increase in the reduction in the amount of these pensions as of 1 July 2001 was evidently reflected in full. Measures intended to place at a disadvantage those seeking early retirement with permanently reduced old-age pensions evidently kindled greater interest in a transfer to disability; therefore there was a rise in the number of newly granted disability pensions, as well as an increase in widow and widower pensions. **In 2003**, the number of newly granted pensions surged by 21%, boosted by the major share of the number of newly granted old-age pensions (by 48%). To a certain extent, this trend can be attributed to demographic developments, i.e. an increase in the number of persons at the age of possible retirement. Main factors influencing a significant rise in the number of newly granted old-age pensions can be considered:

- a significant increase in the number of newly granted early temporarily reduced old-age pensions, which practically tripped compared with 2002. This was mainly the result o a law passed in 2003, according to which this possibility of retirement was retained as of 1 January 2004 solely for certain citizens with long-term health problems, not as a solution for unemployed citizens. During the force of the original law, unemployed persons tried to exploit this possibility,
- Growing unemployment and the uncertainty stemming from changes expected in old-age pensions as of 1 January 2004 could be the cause behind the rising number of newly granted early, permanently reduced old-age pensions by 33% compared with 2002, despite the measures adopted in 2001 to restrict the expedience of this type of pension.
- The number of old-age pensions granted at the age limit increased by 30%. This increased rise compared with preceding years can be explained by the fact that, as a result of measures adopted in 2001, there was a major reduction in the number of people taking early retirement in 2002; these persons then retired (or will retire) when they reach the age limit in subsequent years (i.e. commencing as of 2003).

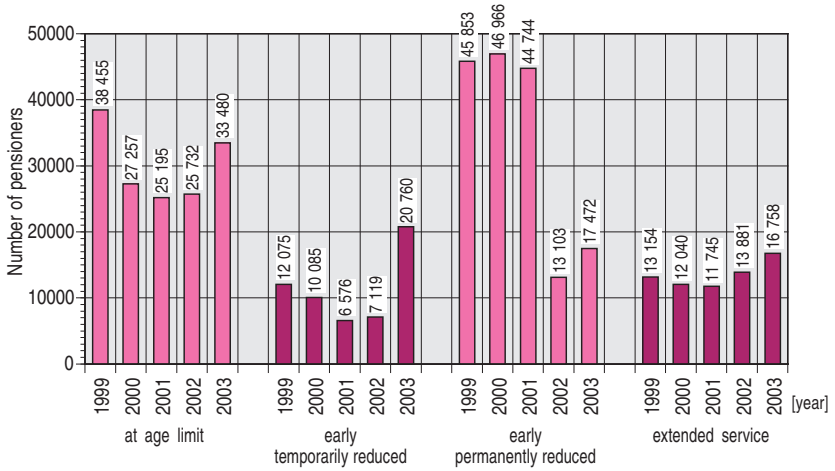
Table 17. Number of newly granted pensions

Year	Old age: At age limit	With extra years' service	Early reduced: Permanently	Early reduced: Temporarily	Proportionate old age	Full disability: From youth	Full disability: Miscellaneous	Partial disability	Widow and widower	Orphan	Total
					Number						
1999	38,455	13,154	45,853	12,075	722	1,055	19,730	26,620	48,468	8,541	214,673
2000	27,257	12,040	46,966	10,085	546	871	17,028	22,019	40,596	6,900	184,308
2001	25,195	11,745	44,744	6,576	519	920	19,236	24,466	42,904	7,957	184,262
2002	25,732	13,881	13,103	7,119	548	903	20,650	25,123	45,972	8,638	161,669
2003	33,480	16,758	17,472	20,760	518	883	22,478	28,273	46,242	8,900	195,764
					Development [% compared with previous year]						
2000	71	92	102	84	76	83	86	83	84	81	86
2001	92	98	95	65	95	106	113	111	106	115	100
2002	102	118	29	108	106	98	107	103	107	109	88
2003	130	121	133	292	95	98	109	113	101	103	121

Source: CSSZ.
Note: see Notes [1] - [5] under Table 13.

- The advantages of working after reaching the age limit without collecting an old-age pension ('extended service') at the amount set down by the law in 2001 have been expressed in another rise in the number of old-age pensions granted after extended service by 21%.

Graph 5. Number of newly granted old-age pensions



Source: CSSZ.
Note: see Notes [1] - [5] under Table 13.

Measures leading to drawbacks in early retirement with a permanently reduced old-age pension, the anticipated significant limitation in the possibility of a temporarily reduced early old-age pension, and rising unemployment in 2003 evidently resulted in greater interest in transferring to disability, and therefore there was a significant increase in the number of newly granted disability pensions, and consequently in the number of widow and widower pensions. This is confirmed by statistics, according to which the share of full and partial disability pensions granted just before retirement age in the overall number of newly granted full and partial disability pensions went up after 2001, while the share of other age groups went down (Table 18).

The **average age of retirement** in 2002 and 2003 was 60 for men and 56 for women, which is rightly a year less than the age limit cited under legislation as the retirement age in these years (Table 19).

There are essentially two reasons for this difference:

(1) The legal age limit in the given year is an age determined in accordance with the original age limit achieved in this year plus the relevant number of months set as the product of the difference between the given year and 1995 (the number of years over which the law has been in effect), and the number of months by which the retirement age is shifted (two months for men and four months for women). At this age, however, there is an entitlement to a pension only after the expiry of the relevant increase, not in the given year as of which this age limit applies. In the given year, persons who originally achieved the age limit in previous years and whose shift in the age limit was lower by the corresponding number of months actually obtain an entitlement to a pension. The age limit of these persons is considered the actual statutory age limit in the given year. Figures previously specified as the retirement age and the actual statutory age limit become more distant from each other every year. Table 20, for example, states that in 2013 the retirement age for men will not be 63, as is constantly claimed, but that men will not have an entitlement to a pension at the age of 63 until 2016, and women not until 2019.

Table 18. Developments in the age structure of pensioners who were granted a full or partial disability pension in 2000–2001

Age	Men				Women			
	2000	2001	2002	2003	2000	2001	2002	2003
Full disability pensions								
- 49	27.7	27.4	27.1	26.8	32.3	31.8	31.4	31.3
50-54	15.1	14.7	14.2	13.9	18.7	18.4	18.1	17.7
55	3.4	4.0	4.0	3.8	3.8	4.7	4.8	4.6
56	3.8	3.6	4.4	4.3	3.8	3.7	4.6	4.8
57	4.1	4.1	4.0	4.7	3.1	3.3	3.3	4.3
58	4.0	4.5	4.5	4.3	2.5	2.7	2.9	3.0
59	3.9	4.2	4.7	4.8	2.7	2.2	2.4	2.6
55-59	**19.3**	**20.5**	**21.6**	**22.0**	**15.9**	**16.6**	**18.1**	**19.3**
60	3.8	3.9	4.2	4.8	3.1	2.5	2.1	2.2
61	2.7	3.0	3.3	3.6	2.9	3.0	2.4	1.9
60 -	31.4	30.5	29.7	28.8	27.1	27.7	28.0	27.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Partial disability pensions								
- 49	47.0	44.7	42.0	40.5	58.9	56.3	53.1	51.4
50-54	28.1	27.8	26.8	26.0	35.6	36.5	36.3	35.8
55	5.3	6.3	6.4	6.1	2.6	3.8	5.7	6.3
56	5.7	5.3	6.3	6.5	1.2	1.6	2.7	3.7
57	5.4	5.8	5.4	6.5	0.5	0.6	0.9	1.4
58	4.1	5.0	5.6	5.4	0.2	0.3	0.3	0.5
59	2.5	2.7	4.2	4.7	0.1	0.1	0.2	0.2
55-59	**22.9**	**25.2**	**27.9**	**29.3**	**4.6**	**6.3**	**9.9**	**12.0**
60	1.4	1.6	2.1	2.6	0.1	0.1	0.1	0.1
61	0.2	0.4	0.7	1.0	0.1	0.1	0.1	0.1
62 -	0.2	0.3	0.4	0.6	0.7	0.6	0.6	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: CSSZ.

Table 19. Average retirement age

Year	total	Old-age			Relative old-age	Full disability	Partial disability	Widower Widow
		at age limit	early reduced					
			perma-nently	tempora-rily				
				MEN				
1999	61	x	x	x	x	48	46	51
2000	60	61	59	59	65	48	47	51
2001	60	61	59	59	66	49	47	52
2002	60	61	59	59	65	49	48	52
2003	60	61	59	60	65	49	48	52
				WOMEN				
1999	56	x	x	x	x	45	45	48
2000	56	57	55	55	65	45	45	49
2001	56	57	55	55	65	45	45	49
2002	56	57	55	55	65	46	46	50
2003	56	57	55	56	65	46	46	50

Source: CSSZ.

Therefore, for international comparisons in particular we misrepresent information and make the situation seem better by citing a higher age.

(2) The average retirement age is given jointly for all types of old-age pension, i.e. including for early old-age pensions. The average early retirement age with a permanently reduced old-age pension was 59 for men and 55 for women, and in the case of temporarily reduced old-age pensions the figure in 2003 was a year higher (60 for men and 56 for women). The influence of early retirement on the average age limit will gradually fall as a result of the reduction of their share in the total number of old-age pensions (temporarily reduced pensions have been practically cancelled, and interest in retiring with an early permanently reduced old-age pension has dwindled following the increase in pension reductions for early retirement). The average retirement age on reaching the age limit (including pensions for extended service, the share of which is not significant in the total number of these pensions) was 61 for men and 57 for women.

Table 20. Difference between the retirement age and the actual statutory age limit

Retirement age	Men	Women with children				
		0	1	2	3 or 4	5 or more
		Year as of which the increased retirement age applies				
53						
54						1998
55					1998	2001
56				1998	2001	2004
57			1998	2001	2004	2007
58		1998	2001	2004	2007	2010
59		2001	2004	2007	2010	2013
60		2004	2007	2010	2013	
61	2001	2007	2010	2013		
62	2007	2010	2013			
63	2013	2013				
		Year as of which an entitlement emerges at the given age				
53						
54						1999
55					1999	2003
56				1999	2003	2007
57			1999	2003	2007	2011
58		1999	2003	2007	2011	2015
59		2003	2007	2011	2015	2019
60		2007	2011	2015	2019	
61	2002	2011	2015	2019		
62	2009	2015	2019			
63	2016	2019				

Source: Ministry of Labour and Social Affairs.

In 2003, for various reasons 170,024 pensions were **terminated** (i.e. just under 26,000 fewer than those pensions newly granted). Of all the terminated pensions, 9.3% were terminated because a different type of pension was granted. In 82% of terminated pensions the reason for discontinuance was the death of the pensioner.

Table 21. Number of terminated pensions

		2002	2003
Total pensions discontinued		144,565	170,024
of which:	**old-age**	64,648	77,526
	full disability	22,300	25,179
	partial disability	13,526	16,783
Reason for discontinuance:			
	granting of a different type of pension	12,919	15,783
	death	115,955	139,651

Source: CSSZ.

B.2.2.3. Amount of pensions

The average amount of pensions paid rose year on year in 2002 by an average of 0.1% and in 2001 by 3%; this growth was substantially lower than in previous years (6% in 2000 and 8% in 2001).

Table 22. Average monthly amount of solo pensions
[December, CZK per month]

Year	total	Old-age not reduced	Old-age reduced permanently	Old-age reduced temporarily	Relative old-age	Disability full	Disability partial	Widow and widower	Orphan	Total
					Total					
1999	5,914	5,936	5,733	5,474	3,524	5,731	3,739	4,250	2,918	5,549
2000	6,296	6,350	5,943	5,686	3,647	6,118	3,905	4,480	3,077	5,909
2001	6,814	6,908	6,303	6,011	3,808	6,638	4,147	4,783	3,289	6,389
2002	6,841	6,949	6,272	5,896	3,705	6,666	4,132	4,739	3,327	6,398
2003	7,083	7,226	6,432	6,122	3,699	6,911	4,243	4,830	3,440	6,616
					Men					
1999	6,557	6,578	6,386	6,065	3,566	6,194	3,947	3,215	2,903	6,101
2000	6,998	7,047	6,650	6,350	3,562	6,611	4,132	3,378	3,064	6,503
2001	7,594	7,682	7,074	6,743	3,609	7,172	4,399	3,620	3,274	7,040
2002	7,627	7,731	7,044	6,625	3,437	7,192	4,382	3,651	3,313	7,045
2003	7,909	8,044	7,241	6,934	3,376	7,449	4,501	3,770	3,426	7,285
					Women					
1999	5,390	5,407	5,274	4,941	3,520	5,163	3,456	4,342	2,931	5,082
2000	5,734	5,781	5,459	5,106	3,655	5,510	3,598	4,584	3,089	5,410
2001	6,195	6,278	5,778	5,372	3,829	5,977	3,809	4,901	3,303	5,841
2002	6,221	6,319	5,744	5,255	3,739	6,015	3,803	4,863	3,340	5,854
2003	6,438	6,571	5,879	5,479	3,748	6,243	3,905	4,963	3,452	6,053

Source: CSSZ
Note: see Notes [1] - [5] under Table 13.

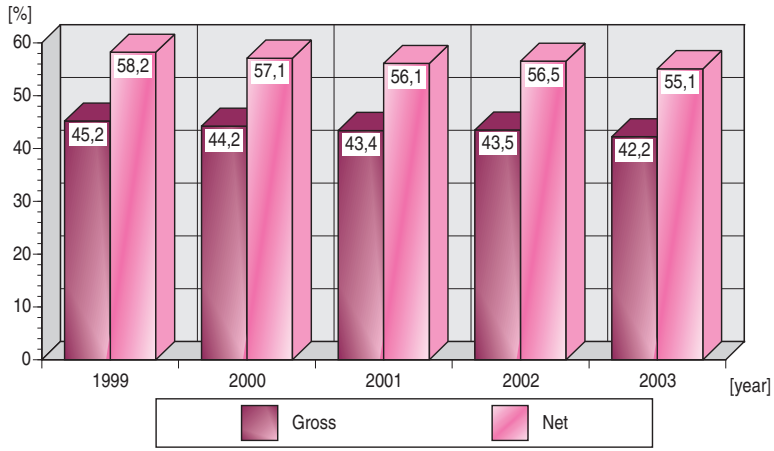
The **growth in the average amount of paid pensions was slower than the growth of the average wage in the national economy** (Table 3), and therefore another of the two parameters of an even financial balance of pension insurance, i.e. the **compensatory ratio, fell**.

Table 23. Relation of average old-age pension to the average wage

Year	Average pension[1] [CZK]	Average wage gross [CZK]	Average wage net[2] [CZK]	Relation of average pension to wage gross [%]	Relation of average pension to wage net [%]
1999	5,724	12,655	9,842	45.2	58.2
2000	5,962	13,490	10,447	44.2	57.1
2001	6,352	14,640	11,324	43.4	56.1
2002	6,830	15,711	12,082	43.5	56.5
2003	7,071	16,764	12,822	42.2	55.1

Source: Ministry of Labour and Social Affairs.
Notes: [1] The average pension is the monthly average of solo old-age pensions paid in the year.
[2] The average net wage is the average gross wage less income tax corresponding to this wage and the relevant health and social insurance premiums.

Graph 6. Ratio of the average old-age pension to the average wage



The monitored growth in the amount of paid old-age pensions is influenced by the 'generation gap'. The average amount of paid pensions would have risen even if pensions had not been valorized, because the pensions of older pensioners, which are lower than the pensions of newly granted pensions, are gradually being discontinued.[14] The growth of individual pensions is therefore actually lower than the growth of the statistically reported average pensions.

Developments in the ratio of an old-age pension to wages can be considered

[14] The average amount of the discontinued pensions has not been monitored by the CSSZ in recent years.

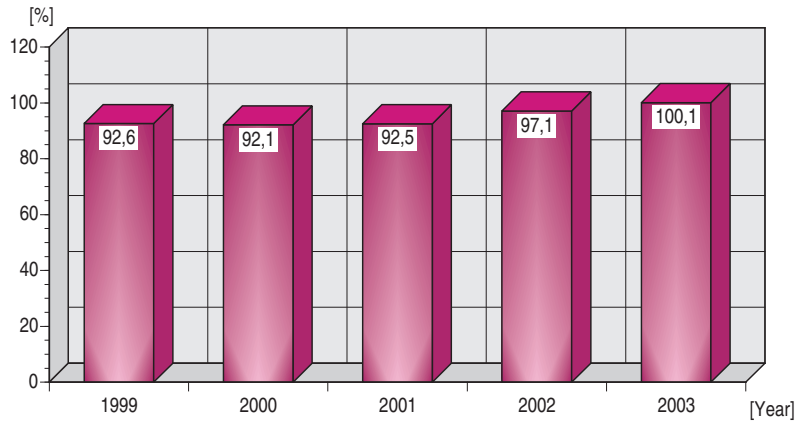
'favourable' in terms of expenditure, but not from the aspect of the pensioners' standard of living, especially in comparison with developments in the living standards of economically active citizens. **Developments in the real value of pensions are lagging behind developments in the real value of wages.** While the real value of wages rose year on year in 2002 by 5.4% and in 2003 by 6.6% (Chapter B.1.1.), the real value of pensions went up by 5% in 2002 and by just 3.1% in 2003.

Table 24. Real value of the average old-age pension

Year	100 in					
	1989	1999	2000	2001	2002	2003
1999	92.6	100.0				
2000	92.1	99.4	100.0			
2001	92.5	99.8	100.4	100.0		
2002	97.1	104.8	105.4	105.0	100.0	
2003	100.1	108.1	108.7	108.3	103.1	100.0

Source: Ministry of Labour and Social Affairs.

Graph 7. Real value of the average old-age pension (expressed as a percentage of the 1989 value)



The average amount of old-age pensions paid out still very much depends on the year they are granted: the longer pensions are paid out, the lower they become. The pensions of old-system pensioners (i.e. pensions granted up to 31 December 1995) are still lower than pensions granted after 1 January 1996, despite the fact that they have been valorized using a more advantageous method in an attempt to equalize the differences between pensions granted according to old regulations and those granted under the new law.

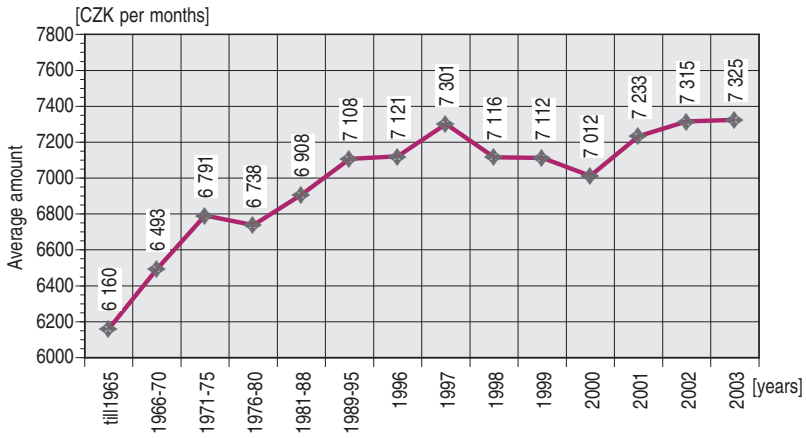
Table 25. Average solo old-age pensions by year of award
(pensions being paid in December 2003, CZK per month)

Year pension granted	Total	Not reduced	Early reduced permanently	Early reduced temporarily
- 1965	6,160	6,160		
1966-70	6,493	6,493		
1971-75	6,791	6,791		
1976-80	6,738	6,738		
1981-88	6,908	6,908		
1989-95	7,108	7,108		
1996	7,121	7,271	6,229	6,498
1997	7,301	7,633	6,594	6,225
1998	7,116	7,494	6,505	6,142
1999	7,112	7,517	6,616	5,971
2000	7,012	7,744	6,464	5,721
2001	7,233	7,849	6,329	5,503
2002	7,315	7,964	5,932	5,888
2003	7,325	8,028	6,061	6,258
Total	7,084	7,227	6,432	6,122
Old-system pensioners[1]	7,001	7,001		
New-system pensioners[2]	7,184	7,670	6,432	6,122

Source: CSSZ.

Notes: [1] Pensions granted up to 31 December 1995.
[2] Pensions granted as of 1 January 1996.

Graph 8. Average solo old-age pensions by year of award
(all old-age pensions paid out in December 2003)



Source: CSSZ.

The **average amount of newly granted pensions** is higher than the average amount of pensions currently paid, and therefore their ratio to the wage in the national economy is more favourable. This can be put down to the fact that these pensions are derived from higher earnings as a result of wage growth and the dynamic pension structure, in which the reduction limits of the earnings decisive for calculating pensions are regularly increased (Table 27).

In 2002 and 2003, the first reduction limit rose at a slower pace than the average wage in the national economy, and therefore the band of earnings into which the amount of pensions is fully included was reduced. The second reduction limit went up in these years at a faster pace than the average wage in the national economy. The result was an expansion (absolute and relative, expressed as a percentage of the first reduction limit) in the band of earnings credited in the amount of the pension at 30%, mainly at the expense of the bracket in which earnings are counted fully in the amount of the pension. These trends were reflected in a reduction of the level of newly granted pensions (their ratio to the wage in the national economy has decreased significantly since 1999).

Table 26. Average amount[1] of new old-age pensions

Pension	Average new pension [CZK per month]					Average new pension [% of gross wage]				
	1999	**2000**	**2001**	**2002**	**2003**	**1999**	**2000**	**2001**	**2002**	**2003**
Old age total	5,991	6,106	6,399	7,055	7,224	47.3	45.3	43.7	44.9	43.1
To age limit	6,490	6,793	7,172	7,716	8,062	51.3	50.4	49.0	49.1	48.1
Extra years' service	6,222	6,485	6,823	7,226	7,512	49.2	48.1	46.6	46.0	44.8
Total not reduced	7,272	7,485	7,916	8,621	9,157	57.5	55.5	54.1	54.9	54.6
Early total	5,547	5,633	5,843	5,755	6,120	43.8	41.8	39.9	36.6	36.5
Reduced temporarily	5,370	5,513	5,838	5,917	6,224	42.4	40.9	39.9	37.7	37.1
Reduced permanently	5,593	5,659	5,844	5,667	5,996	44.2	41.9	39.9	36.1	35.8
Proportionate old age	2,467	2,532	2,467	2,425	2,458	19.5	18.8	16.8	15.4	14.7
Old age + proportionate old age	5,974	6,090	6,381	7,021	7,201	47.2	45.1	43.6	44.7	43.0
Full disability	6,146	6,317	6,622	7,006	7,267	48.6	46.8	45.2	44.6	43.3
From youth	4,889	5,013	5,217	5,546	5,727	38.6	37.2	35.6	35.3	34.2
Miscellaneous	6,213	6,384	6,689	7,069	7,327	49.1	47.3	45.7	45.0	43.7
Partial disability	3,697	3,787	3,933	4,117	4,247	29.2	28.1	26.9	26.2	25.3
Widow and widower	3,865	3,969	4,116	4,332	4,460	30.5	29.4	28.1	27.6	26.6
Orphan	3,576	3,245	3,323	3,469	3,536	28.3	24.1	22.7	22.1	21.1
TOTAL	5,385	5,525	5,704	5,957	6,287	42.5	41.0	39.0	37.9	37.5

Source: CSSZ.
Note: [1] see Notes [1] - [5] Table 13.

Table 27. Reduction limits for the calculation of pensions

	1999	**2000**	**2001**	**2002**	**2003**	**2004**
First reduction limit [CZK]	6,100	6,300	6,600	7,100	7,400	7,500
(% of average wage in national economy)	48.2	46.7	45.1	45.2	44.1	x
Second reduction limit [CZK]	13,000	14,200	15,300	16,800	17,900	19,200
(% of average wage in national economy)	102.7	105.3	104.5	106.9	106.8	x

Source: Ministry of Labour and Social Affairs.

Table 28. Relation of a new old-age pension granted in 2004 to the wage, comparing different wage levels

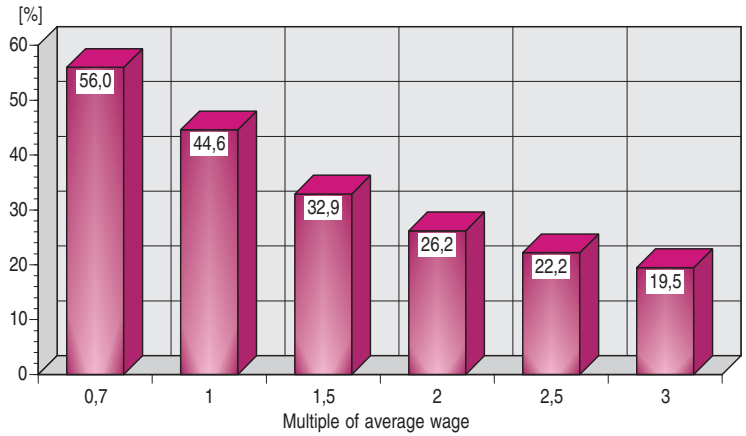
Multiple of average wage	Amount of pension [CZK per month]	Wage gross [CZK per month]	Wage net [CZK per month]	Relation of pension to wage gross [%]	Relation of pension to wage net [%]
0.7	6,576	11,735	9,203	56.0	71.5
1.0	7,484	16,764	12,822	44.6	58.4
1.5	8,276	25,146	18,660	32.9	44.4
2.0	8,780	33,528	24,160	26.2	36.3
2.5	9,284	41,910	29,668	22.2	31.3
3.0	9,784	50,292	35,161	19.5	27.8

Source: Ministry of Labour and Social Affairs.

Note: The pension calculation was made assuming an insurance period of 40 years as at the statutory age limit, an assessment base for the pension calculation based on an average wage of CZK 16,799, and an average wage in the national economy in 2003 of CZK 16,764; only the deductible item for the taxpayer is taken into account when determining the net wage.

As a result of the established reduction limits of earnings decisive for calculating pensions and developments in these limits, the ratio of newly granted pensions to earnings achieved continues to fall considerably as the earnings rise.

Graph 9. Relation of a new old-age pension granted in 2004 to the wage, comparing different wage levels



However, over the period the pension is paid out its level decreases and lags behind developments in wages. This is because **pension valorization primarily tracks growth in the cost of living and only partly developments in wages** (Table 29).

Table 29. Overview of pension increases

	Month and year the adjustment entered into effect								
	April 1996	October 1996	August 1997	July 1998	August 1999	December 2000	December 2001	January 2003	January 2004
Increase in the base assessment of the pension [CZK]									
	240	140	200	50					
Increase in the percentage-based assessment of the pension									
Old-system pensioners	8%	6%	8%	9%	7.5%	9%	11%	4%	2.5%
New-system pensioners	8%	6%	8%	5%	5%	5%	8%	3.8%	
Amount of base assessment [CZK]									
	920	1,060	1,260	1,310	1,310	1,310	1,310	1,310	1,310

Source: Ministry of Labour and Social Affairs.

Note: old-system pensioners = pensions granted before 1 January 1996; new-system pensioners = pensions granted after 31 December 1995.

B.2.2.4. Reduction in pensions on early retirement

In the current settings of the pension system, on early retirement the percentage assessment of the old-age pension is reduced as shown in Equation C.6. Considering the existence of the basic pension assessment and its varying weight in the overall pension for the different types of insured persons, the impact of this reduction on the total amount of the old-age pension can differ.

The greatest reduction in a pension[15] occurs among insured persons who have been insured for a short period and have a high assessment base, which is caused by the strong effect of the reduction in the percentage assessment and the relatively high weight of this in the overall pension. In contrast, the lowest impact occurs in the reduction among people with a low assessment base and long insurance period.

Table 30. Reduction in pension on early retirement by one year (%)

Monthly income [CZK]	Insurance period (years) 25	30	35	40	45
5,000	-5.7	-5.1	-4.6	-4.2	-3.8
10,000	-6.7	-5.9	-5.3	-4.7	-4.3
15,000	-7.1	-6.2	-5.5	-4.9	-4.4
20,000	-7.3	-6.3	-5.6	-5.0	-4.5
25,000	-7.4	-6.4	-5.6	-5.0	-4.6
30,000	-7.4	-6.4	-5.7	-5.1	-4.6

Source: Ministry of Labour and Social Affairs

[15] The monthly pension is meant here.

From the aspect of actuarial equity[16] the current settings are disadvantageous for early old-age pensions among all the analyzed groups of insured persons; the same distribution as in the previous paragraph applies. Here, though, there is an additional effect, which is the amount of the future valorization of pensions. With a higher rate of valorization, the disadvantages of early old-age pensions decrease.[17]

Table 31. Disadvantages of early old-age pensions[18] in cases of wage valorization

Monthly income	Insurance period (years)				
[CZK]	**25**	**30**	**35**	**40**	**45**
5,000	1.9	1.3	0.8	0.3	0.0
10,000	3.1	2.2	1.5	0.9	0.5
15,000	3.4	2.4	1.7	1.1	0.6
20,000	3.7	2.6	1.8	1.2	0.7
25,000	3.8	2.7	1.9	1.3	0.7
30,000	3.9	2.8	1.9	1.3	0.8

Source: Ministry of Labour and Social Affairs.

[16] The relationship of the total pension paid (Equation C.8) in the case of two insured persons with the same 'insurance history', of whom one retires early and the other waits until the statutory age limit (the effect of changes caused by the reduction limits is not taken into account).

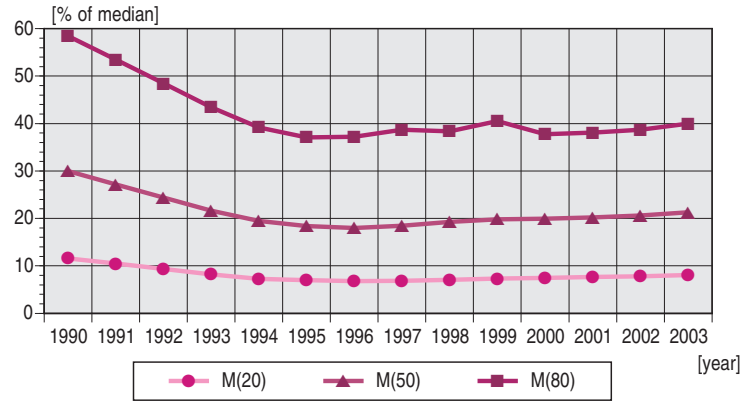
[17] The effect of the division of valorization between a basic and percentage-based assessment has not been analyzed.

[18] A higher value indicates the more severe drawbacks of early retirement. Early retirement is advantageous where the values are negative.

B.2.2.5. Differentiation of pensions based on the amount of the pension[19]

The changes introduced by Act No. 155/1995 as of 1 January 1996 were manifested in the halting of the long-term reduction in the differentiation of existing pensions based on amount, which was particularly evident between 1990 and 1995.

Graph 10. Basic characteristics of the differentiation of existing old-age pensions (solo) based on amount (total)



Source: Ministry of Labour and Social Affairs.

[19] To gauge the differentiation of old-age pensions by the amount of the pension, quantiles and characteristics derived from them will be used. A quantile is the amount of income (e.g. of a pension) achieved by a certain percentage of pensioners. For example, a 10% quantile is the amount of income specifying that 10% of persons have an income up to this amount. A 50% quantile is called a median and, in cases of normal distribution, is equal to the average. The basic characteristics will be the breadth of income brackets around a median, expressed in the percentages of the median in which they are situated, i.e.:

- **20% of pensioners**: the relevant characteristics are labelled **M(20)** = $100*(k_{60} - k_{40})$ / median,
- **50% of pensioners**: the relevant characteristics are labelled **M(50)** = $100*(k_{75} - k_{25})$ / median,
- **80% of pensioners**: the relevant characteristics are labelled **M(80)** = $100*(k_{90} - k_{10})$ / median,

where k_x specifies the x% quantile.

The higher the M(XX) numbers, (i.e. the broader the interval in which the relevant share of pensioners is located), the greater the disparity in income.

Table 32. Basic characteristics of the differentiation of existing old-age pensions (solo) based on amount

Year	M(20)			M(50)			M(80)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1999	7.3	6.9	5.2	19.8	18.5	15.0	40.5	35.6	34.1
2000	7.5	6.7	5.4	19.9	16.8	15.4	37.8	33.5	34.6
2001	7.7	6.5	5.5	20.2	16.3	15.8	38.1	33.7	35.4
2002	7.8	6.6	5.7	20.6	16.6	16.4	38.7	34.3	36.6
2003	8.1	6.8	6.0	21.3	17.1	17.3	40.0	36.3	38.3

Source: Ministry of Labour and Social Affairs.

The differentiation of existing old-age pensions based on the amount thereof is influenced by a number of factors. It is reduced with the transfer from the whole set of old-age pensions to the sets for men and women (Table 32). It is also influenced by the fact that, besides the pensions granted at the age limit, the full range of old-age pensions also includes early pensions. However, in the set of existing old-age pensions as a whole, the representation of pensions granted at the age limit is much higher and information about differentiation in these sets therefore does not differ that much from information in the whole set of existing pensions for men or women. As regards differentiation in sets of early, permanently reduced old-age pensions, in comparison with the differentiation of old-age pensions granted at the age limit it is much lower among men (men in lower income brackets take early retirement) and much higher among women (the group of women taking early retirement is evidently not as homogeneous as the set of men; in particular we can assume that a significant differentiation factor is the insurance period in relation to the number of children reared).

The differentiation of old-age pensions being paid in 2002 and 2003 continued to grow moderately, mainly thanks to the slightly faster rise in higher pensions, especially those of women. The level and development are influenced by the following factors in particular:

(1) the development in the differentiation of newly granted old-age pensions in individual years (Table 33), which as a result of dynamic elements in the formula for setting the amount of a pension has a clear growth trend;

Table 33. Key characteristics of the differentiation of newly granted old-age pensions (solo) based on amount

Year	M(20)			M(50)			M(80)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1999	8.8	5.9	7.8	22.8	17.0	21.0	45.0	30.8	39.4
2000	10.3	6.6	9.1	26.7	15.6	24.6	45.9	30.6	45.9
2001	10.8	6.7	10.1	27.5	16.7	27.4	48.0	33.8	51.4
2002	11.8	6.7	11.0	29.0	18.7	29.7	52.3	40.9	54.7
2003	11.9	8.6	11.1	31.4	20.8	29.6	58.0	43.0	56.4

Source: Ministry of Labour and Social Affairs.

(2) reductions in the share of the basic assessment in the amount of the pension, whereby the basic assessment has not been raised since 1998;

(3) valorizations of pensions, whereby only the percentage-based assessment (the share of which in the overall amount of the pension paid is increasingly significant) is increased;

(4) the varying differentiation of pensions, with regard to the time they are granted.

B.2.3. SICKNESS INSURANCE

Sickness insurance, like pension insurance, is based on the pay-as-you-go method of financing, where the financial balance is equalized every year if the income from premiums (less operating expenses) is equal to expenditure on sickness insurance benefits in the given year, i.e. the following equation applies:

$$PP \times PKDR \times DV \times PS \times ÚV \times (1 - PV) = DD \times PDN + VOD, \quad [5]$$

where PP is the number of insured persons, PKDR the number of days in the calendar year, DV the average daily assessment base for premium payments, PS the contribution rate, UV the premium collection rate, PV the operating expenditure expressed as a share of total income, DD the average daily sickness insurance benefit, PDN the number of calendar days the insured person is sick, and VOD the expenditure on other sickness insurance benefits. We will not express VOD in more detail because the largest share in expenditure on sickness insurance benefits is taken up by sickness benefit and this share (p) does not change that much in the individual years. Therefore the equation [5] can be replaced with the following equation:

$$PP \times PKDR \times DV \times PS \times ÚV \times (1 - PV) \times p = DD \times PDN \quad [6]$$

By adjusting the equation [6] an equation can be obtained for the key indicators of sickness insurance:

$$PS \times ÚV \times (1 - PV) \times p = DD/DV \times PDN/(PKDR \times PP), \quad [7]$$

where DD/DV is the relation of the sickness benefit to the earnings achieved and characterizes the level of sickness insurance benefits, and PDN/(PKDR x PP) is the average sickness rate. It ensues from equation [7] that an even financial balance does not depend directly on the number of insured persons, but on the contribution rate (modified by the collection rate and operating expenditure), the level of benefits, and the sickness rate.

The number of premium payers (including problems connected with their structure in respect of the amount of premiums), the average assessment base for the collection of premiums and its relationship to the average wage in the national economy, and the premium collection success rate are discussed in Chapter B.2.1., a joint section for pension and sickness insurance. Operating expenditure is assessed in Chapter B.2.5., again for pension and sickness insurance together.

In the period up to 2001, total sickness insurance income was higher than total expenditure on sickness insurance benefits; since 2002, this relationship has reversed, and income is insufficient to cover expenditure.

Table 34. Sickness insurance revenues and expenditure
(Chapter 313 – Civil Sector)

Year	Revenues[1] [CZK bn]	Expenditure [CZK bn]	Revenues - Expenditure [CZK bn]	Expenditure [% of GDP]
1999	25.8	19.3	6.5	1.01
2000	27.3	27.2	0.1	1.37
2001	29.7	29.6	0.1	1.36
2002	31.6	32.6	-1.0	1.43
2003	33.3	34.3	-1.0	1.42

Source: CSSZ.
Note: [1] Including fines, penalties, and additional premiums.

The rise in revenues has gradually decelerated because the number of persons with sickness insurance has fallen; there was a significant reduction in 2003 in particular. The cause was evidently the significant growth in the number of newly granted old-age pensions in this year.

If there had been no change in the sickness rate and the level of benefits in the monitored period, the fall in the number of insured persons would have meant a fall in both revenues and expenditure.

Table 35. Number of sickness insured persons (thousands)

Year	Sickness insurance held by			Sickness insurance held by
	Employees	Self-employed	Total	Self-employed
1999	4,117	322	4,439	610
2000	4,016	313	4,329	619
2001	4,066	304	4,370	628
2002	4,068	298	4,366	641
2003	4,020	295	4,315	646

Source: CSSZ.

However, expenditure on sickness insurance in 2002 rose significantly (by 10% compared with 2001) as a result of the rise in the level of benefits and of the rise in the average percentage of work incapacity. In the subsequent year (2003), the year-on-year increase in expenditure was half that of 2002, because the rise in the level of benefits slowed considerably, and the increase in the average percentage of work incapacity was not that pronounced either.

The largest share of expenditure in sickness insurance benefits is taken up by sickness benefit, which in 2003 accounted for 86% of total expenditure (2002: 87%). Expenditure on maternity benefit accounted for 11% of total expenditure and expenditure on family member care benefit 3%; in 2002–2003 there was a slight growth trend in both these benefits, and expenditure on pregnancy and maternity compensation benefit made up for the remainder. The self-employed are not entitled to a family member care benefit or pregnancy and maternity compensation benefit.

Table 36. Expenditure on sickness insurance benefits

Year	Sickness benefit	Family member care benefit	Pregnancy and maternity compensation benefit	Maternity benefit	Total
			Absolute terms [CZK bn]		
1999	16.434	0.696	0.006	2.151	19.287
2000	23.653	0.785	0.008	2.760	27.205
2001	25.574	0.957	0.007	3.047	29.585
2002	28.222	0.893	0.007	3.487	32.609
2003	29.523	1.004	0.006	3.774	34.307
			Relative terms [% of total]		
1999	85.21	3.61	0.03	11.15	100.00
2000	86.94	2.88	0.03	10.14	100.00
2001	86.44	3.23	0.02	10.30	100.00
2002	86.55	2.74	0.02	10.69	100.00
2003	86.06	2.93	0.02	11.00	100.00

Source: CSSZ.

Sickness developments are characterized by the sickness rate, the average duration per case of sick leave, and the number of cases of sick leave per 100 persons with sickness insurance. The following equation applies to these indicators:

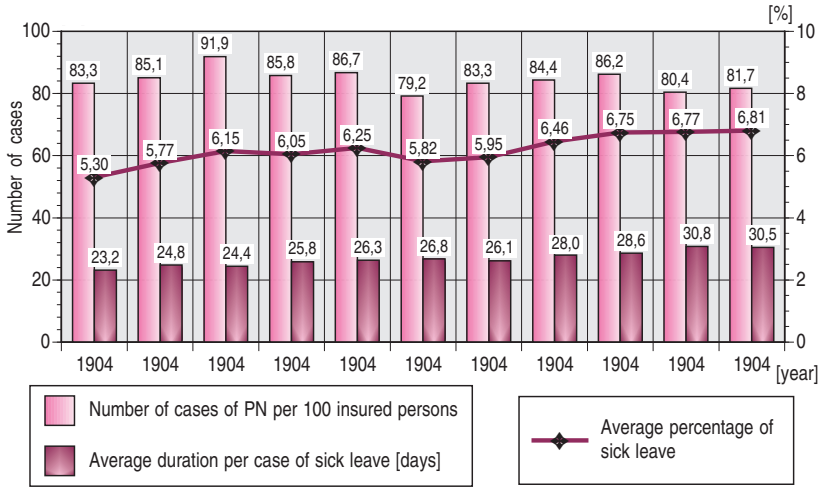
Sickness rate = Average duration per case of sick leave x number of cases of sick leave per 100 sickness insured persons / / number of days in the calendar year [8]

Table 37. Key sickness insurance indicators

Year	Sickness rate (average percentage)	Average duration of each case of sick leave	Number of cases of sick leave per 100 persons
1999	5.95	26.1	83.3
2000	6.46	28.0	84.4
2001	6.75	28.6	86.2
2002	6.77	30.8	80.4
2003	6.81	30.5	81.7

Source: Czech Statistical Office.

Graph 11. Key sickness insurance indicators



Source: Czech Statistical Office.

The rise in the average percentage of work incapacity in 2002-2003 compared with the preceding period (1999-2001) is caused in particular by the extension in the average period per case of sick leave, because the number of cases of sick leave per 100 persons with sickness insurance fell in this comparison.

The **amount of the sickness benefit** depends on the earnings achieved and on the specification of the reduction limits of the daily assessment base for the calculation of sickness benefit; from 2000 to 2002 these limits were valorized annually as at 1 January in line with wage developments. The wage is included fully in the first reduction limit; only 60% of the wage is included in the second reduction limit; the wage is not taken into account above this second limit. Sickness benefit is provided at 69% of the base thus set; over the first three days sickness benefit is provided at a reduced level of 50%. For 2003, in connection with the cost-cutting measures related to the floods, and for 2004 and 2005, in the scope of public budget reform, the reduction limits were not valorized. What is more, in the framework of public budget reform, legislation was introduced whereby the daily assessment base for days 1 to 14 of sick leave was reduced from 100% to 90% in the case of an amount up to the first reduction limit, and whereby the sickness benefit for the first three calendar days of sick leave was reduced from 50% to 25%.

Table 38. Highest daily assessment base and daily benefit

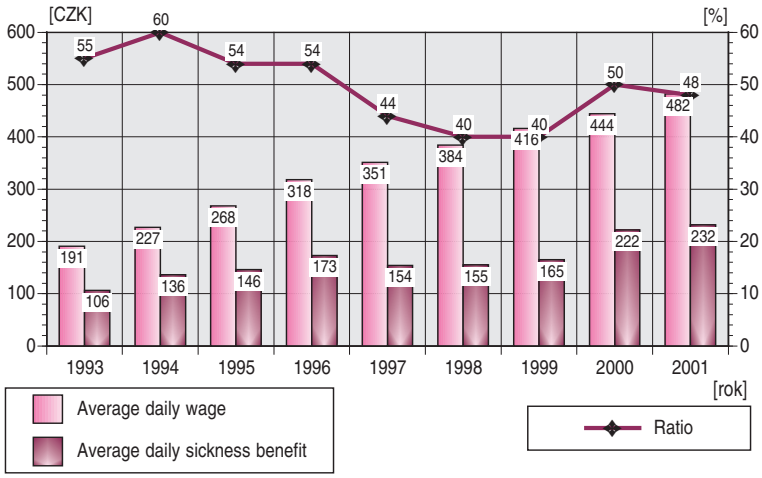
Validity of reduction limits	Reduction limits first [CZK]	Reduction limits second [CZK]	Highest daily assessment base [CZK]	Highest daily benefit[1] [CZK]
Prior to 1 October 1999	270		270	186
1 October 1999 - 31 December 1999	360	540	468	323
1 January 2000 - 31 December 2000	400	590	514	355
1 January 2001 - 31 December 2001	430	630	550	380
1 January 2002 - 31 December 2002	480	690	606	419
1 January 2003 - 31 December 2003	480	690	606	419
1 January 2004 - 31 December 2005	480[2]	690	606	419

Source: Ministry of Labour and Social Affairs.

Notes: [1] The highest daily benefit is set at a rate of 69%.

[2] For days 1–14 of sick leave, only 90% of the daily assessment base is included up to the first reduction limit; the highest daily assessment base is therefore CZK 558 and the corresponding benefit is CZK 386. As of the fifteenth day of sick leave, income up to the first reduction limit is credited in full (CZK 606 and CZK 419).

Graph 12. Average daily sickness benefit, average daily wage, and their share



Source: Ministry of Labour and Social Affairs.

The average daily sickness benefit went up year on year in 2002 by 10% and in 2003 by just under 5%. The significant increase in benefits in 2002 was the result of the valorization of reduction limits as of 1 January 2002. In 2003, no valorization took place and the growth in the average benefit was caused in particular by wage growth. The ratio of the average daily sickness benefit to the average gross wage in the national economy amounted to 50% in 2002 and 49% in 2003. The highest possible daily benefit did not change in the period 2002–2003.

Table 39. Reduction limits and average wage in the national economy

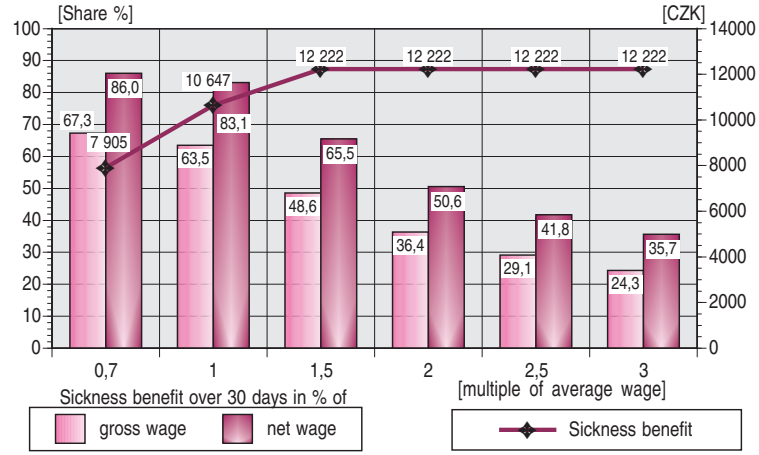
Year	Reduction limits First [CZK]	Reduction limits Second [CZK]	Average gross wage in national economy Monthly [CZK]	Average gross wage in national economy Daily [CZK]	Average daily sickness benefit [CZK]	Average daily sickness benefit [% of average daily wage in national economy]
1999	360	540	12,655	416	165	40
2000	400	590	13,490	444	222	50
2001	430	630	14,642	482	232	48
2002	480	690	15,711	517	256	50
2003	480	690	16,764	551	268	49

Source: Ministry of Labour and Social Affairs.

Note: The average daily wage is calculated as a share of the average monthly wage and the average number of days in the month.

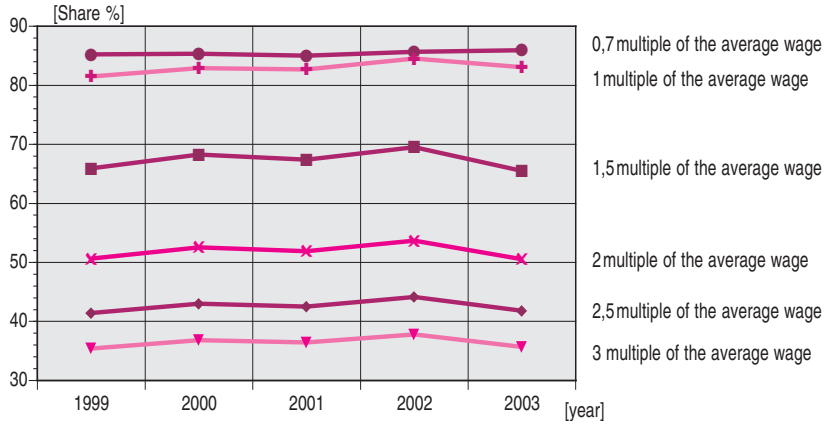
The impact of the reduction limits is that as the wage rises, the share of the benefit in the wage decreases (Graph 13, Graph 14), i.e. in the sickness insurance system there is fairly high solidarity between high-income insured persons and low-income groups of insured persons.

Graph 13. Amount of sickness benefit over 30 days in 2003 and the share thereof in relation to the gross and net wage for various wage amounts



Source: Ministry of Labour and Social Affairs.

Graph 14. Share of the amount of sickness benefit in relation to the net wage as of 1999 for various wage amounts



Source: Ministry of Labour and Social Affairs.

B.2.4. FULFILLMENT OF INTERNATIONAL CONVENTIONS

B.2.4.1. Pension insurance

In the field of social security, the Czech Republic is bound by bilateral and multilateral conventions. The multilateral conventions include the International Labour Organization (ILO) Convention No. 102, on Social Security (Minimum Standards) of 1952, ILO Convention No. 128, on Invalidity, Old-Age and Survivors' Benefits, of 1967 (both Conventions entered into force for the Czech Republic in January 1993), and the European Code of Social Security of the Council of Europe ('Code'). ILO Convention No. 102 and the Code, which have more moderate standards for the required level of benefits, were ratified by the Czech Republic for all types of pensions under pension insurance; the more stringent ILO Convention No. 128 has been ratified for old-age pensions only.

- **Old-age pension**

ILO Convention No. 102 requires that the **share of the old-age pension in relation to the wage** in the year preceding retirement amount to 40%. ILO Convention No. 128 requires a share of 45%. The Conventions are fulfilled if the required 'compensation ratio' (benefit replaces previous income before an insured event) is achieved for a newly granted pension **at least for one selected typical recipient**. A typical recipient is an insured person with 30 years' insurance and with a wage equal to 1.25 times the average wage in the national economy, or with the wage of a **skilled labourer** (lathe operator). Because pensions in the Czech Republic are taxed starting at amounts above CZK 144,000 per year and health insurance is paid for pensioners by the state, the ILO accepts a determination of the **share in relation to the net wage** in the case of the Czech Republic.

Table 40. Fulfillment of ILO conventions on old-age pensions as at 1 January 2004

Wage of skilled labourer [CZK per month]		Amount [CZK per month]	Old-age pension [% of wage of skilled labourer]	
gross	**net**		**gross**	**net**
17,682	13,826	6,060	34.3	43.8

Source: Ministry of Labour and Social Affairs.

Because the compensation ratio for a newly granted old-age pension in 2004 is just 43.8%, the Czech Republic meets the criteria of Convention No. 102 and the Code, but has **stopped meeting the criteria of Convention No. 128**.

Non-fulfillment of the Convention can be attributed to the fact that the **first reduction limit for the setting of the calculation base continues to be increased at a slower pace than the rise in the average wage**. Until 1999, the Czech Republic fulfilled Convention No. 128 even when the compensation ratio was set at 1.25 times the average wage in the national economy, but in subsequent years the Convention was fulfilled by applying the average wage of a skilled labourer (which is lower), and now there is no admissible criterion left under which the Czech Republic could fulfill the ratified Convention No. 128.

In order to fulfill Convention No. 128 in 2004 it would be necessary for the first reduction limit for the appointment of the calculation base, which is CZK 7,500, to be raised to CZK 8,000. With wages forecast to rise by 5.5%-6.0% in 2004, it would be necessary to raise the reduction limit from the current CZK 7,500 to CZK 8,600 as of 1 January 2005 in order to fulfill Convention No. 128. However, such a significant increase in the reduction limit, with the considered minimum valorization of existing pensions by 6.1% (corresponding to agreed measures in the scope of public budget reform), would mean that the pensions granted in 2005 would be approximately CZK 250 higher than the comparable pensions awarded in 2004, and this would create a new batch of old- and new-system pensioners. If the differences between the pensions were not to increase, in 2005 it would be necessary to increase current pensions by CZK 600, at a cost of CZK 19 billion.

- **Full disability pension and survivors' benefits**

ILO Convention No. 102 and the Code require a **compensation ratio of 40%** for these benefits. Newly granted full disability pensions and survivors' benefits are typically provided to employees with a wage equal to 1.25 times the average wage in the national economy, or a skilled labourer with two children. That is why, in the calculation, children's allowances are included in the income of an employee

or pensioner. Similarly to old-age pensions, the ratio of the benefit to the net wage is decisive for assessments of the Fulfillment of the Convention.

Table 41. Fulfillment of ILO conventions for disability pensions as at 1 January 2004

Wage of skilled labourer [CZK per month] gross	net	Disability pension [CZK per month]	Allowances for 2 children [CZK per month]	Wage of skilled labourer including allowances [CZK per month] gross	net	Disability pension including allowances Amount [CZK per month]	[% of wage of -skilled labourer[1]] gross	net
17,682	14,481	6,060	1,319	19,001	15,800	7,379	38.8	46.7

Source: Ministry of Labour and Social Affairs.
Note: [1] Including children's allowances.

Table 42. Fulfillment of ILO conventions for survivor pensions as at 1 January 2004

Wage of skilled labourer [CZK per month] gross	net	Widow and 2 orphan pensions [CZK per month]	Allowances for 2 children [CZK per month]	Wage of skilled labourer including allowances [CZK per month] gross	net	Widow and 2 orphan pensions plus allowances Amount [CZK per month]	[% of wage of skilled labourer[1]] gross	net
17,682	14,481	10,105	1,319	19,001	15,800	11,424	60.1	72.3

Source: Ministry of Labour and Social Affairs.
Note: [1] Including children's allowances.

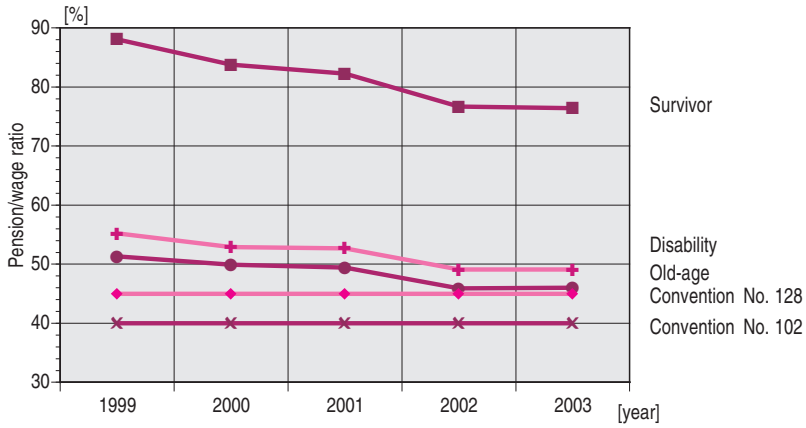
In respect of full disability pensions and survivor pensions, in the Czech Republic fulfills the ratified Convention.

The required minimum level (40%) of a newly granted invalid pension is, according to regulations valid in 2004, fulfilled in the case of the net wage of a skilled labourer (46.7%) and in the case of an employee with a wage 1.25 times the average wage in the national economy (42.0%).

In the case of **survivor pensions**, the Convention requires a compensation ratio of 40%. The level of survivor pensions granted in 2004 is **high above** this ratio; for all the typical recipients of the benefit the compensation ratio is 52.9%-72.3%.

In conclusion, we can state, that the compensation ratio, which is a criterion for the Fulfillment of the Convention on the minimum level of benefits, is continuing to fall (Graph 15). In 2004, the Czech Republic stopped fulfilling the criteria of ILO Convention No. 128 for old-age pensions; without a significant increase in expenditure on pensions, it will not be able to meet the criteria in the next few years either.

Graph 15. Criteria for the fulfillment of conventions on the minimum level of pensions



Source: Ministry of Labour and Social Affairs.

The criteria of ILO Convention No. 102 and the Code, which are more moderate, are still met by the Czech Republic. However, if the reduction limits for the calculation of pensions continue to be increased by less than wage growth, the Czech Republic will stop fulfilling the requirements of these conventions for old-age pensions in the next three to five years.

B.2.4.2. Sickness insurance

ILO Convention No. 102 and 130, together with the Code, discuss sickness benefits. They require that the ratio of sickness benefits to previous income be at a level of 45%. ILO Convention No. 130 requires a ratio of 60% in relation to the recipients previous wage. The table reveals that the Czech Republic meets these requirements with a large reserve.

Table 43. Fulfillment of ILO conventions for sickness benefits as at 1 January 2004

	Wage [CZK per month] gross	net	Sickness benefit [CZK per month]	Allowances for 2 children [CZK per month]	Wage including allowances [CZK per month] gross	net	Amount [CZK per month]	Sickness benefit plus allowances [CZK per month] gross	net
Wage of skilled labourer	17,682	14,526	10,191	1,319	19,001	15,845	11,510	60.6	72.6

Source: Ministry of Labour and Social Affairs.
Note: [1] Including children's allowances.

ILO Convention No. 102 and the Code require that the share of maternity benefit amount to 45% of the previous income, a condition the Czech Republic by far exceeds.

Table 44. Fulfillment of ILO conventions for maternity benefit as at 1 January 2004

	Wage [CZK per month]		Wage of skilled labourer		
			Amount	% of wage[1]	
	gross	net	[CZK per month]	gross	net
Wage of skilled labourer	17,682	13,446	11,310	64.0	84.1

Source: Ministry of Labour and Social Affairs.
Note: [1] including children's allowances.

B.2.5. OPERATING EXPENDITURE

Organizational costs are reflected in the overall balance of the social insurance system. The operating expenditure of the CSSZ is very low compared with similar institutions. Budget resources for operating expenditure serious complicate the coverage of the current needs of the authority's basic operations.

Table 45. Operating expenditure [Values in CZK millions]

	2000	2001	2002	2003
Total operating expenditure	3,402	3,878	4,286	4,700
Total investment	442	339	337	544
of which: Building and machinery	280	213	265	500
Computer technology	162	126	72	44
Total administrative expenditure	2,960	3,539	3,949	4,156
of which: Wages and other personnel expenses	1,153	1,290	1,466	1,601
Insurance and Cultural and Social Needs Fund	424	477	538	592
Postage	530	523	489	578
Net material expenditure	853	1,249	1,456	1,385
Operating costliness[1] [in %]	1.58	1.65	1.71	1.78
Performance indicator[2] [in %]	0.80	0.84	0.87	0.90

Source: CSSZ.
Notes: [1] Share of total operating costs (including investments) in total revenues (%).
[2] The share of total operating costs (including investments) in the sum of total income and benefit expenditure.

In the year-on-year comparison (2003/2002), operating expenditure increased by 9.66%. Expenditure on wages, premiums, the Cultural and Social Needs Fund (KKSP), and charges payable to the Czech Post Office are prescribed by the CSSZ as binding budget indicators. Therefore, the indicator of net material expenditure is informative about the possibilities of funding the everyday operating requirements of the CSSZ, and for the actual securing of social security. The amount of this indicator is inadequate at a time when higher demands are placed on the CSSZ in connection with accession to the EU and the need to improve the administration of the pension and sickness insurance system, and build a modern, efficient, and effective information system.

The CSSZ carries out extensive tasks in the field of state income (more than 38% of national budget income) and in the field of expenditure (almost 33% of national budget expenditure). The performance indicator in 2003 was 0.90%. No other similar institution in the Czech Republic has such a low ratio of operating costs to work done.

PART C

SOCIAL INSURANCE PROJECTIONS

C.1. PROJECTIONS OF PARAMETERS INFLUENCING SOCIAL INSURANCE DEVELOPMENT

C.1.1. ECONOMIC DEVELOPMENT

As regards an estimate of expected future economic developments, a certain influence of various pension policies is expected to be felt (especially changes in the age limit for a claim to an old-age pension) on the development of basic economic parameters (developments in GDP, the rate of participation, etc.). A shared requirement for all projections is the development in average wages (Table 46), which is taken as being independent of pension policies.

Table 46. Average nominal wages and prices

Year	Wage growth	Inflation
2004–2010	5.6	2.9
2010–2020	4.3	2.2
2020–2060	3.6	1.7

Source: Ministry of Labour and Social Affairs.

In contrast, developments in GDP (Table 47) are taken as a dependent variable which is directly connected to wage growth (or labour productivity)[20] and overall employment, which is based on the rate of economic activity (Table 50 and Table 51) and the unemployment rate.

[20] Labour productivity is expected to be fully reflected in wages.

Table 47. Forecast developments in GDP

Year	Current situation	Age limit increased to 65	Age limit increased to 67
2004–2010	6.2	6.2	6.2
2010–2020	4.5	4.6	4.6
2020–2030	3.1	3.5	3.5
2030–2040	2.8	2.9	3.2
2040–2050	2.9	2.9	3.1
2050–2060	3.2	3.1	3.1

Source: Ministry of Labour and Social Affairs.

C.1.2. DEMOGRAPHIC DEVELOPMENT

All projections concerning the social insurance system are based on a demographic prognosis drawn up by FSChU[21] that extends to 2065. Compared with the previous report, the length of all projections has been shifted by 35 years, making it easier to assess the effect of ageing on the whole system of social (and especially pension) insurance.

Demographic developments are considered to be completely independent of policies in the pension insurance system. The basic characteristics of the expected future demographic development are contained in the following table (Table 48).

Table 48. Basic characteristics of future demographic development[22]

Year	Fertility	Life expectancy at birth		Migration
		Men	Women	[thousands of persons]
2003	1.19	72.4	78.8	24.0
2010	1.34	74.1	80.3	20.0
2020	1.51	76.5	82.4	24.9
2030	1.57	78.7	84.0	25.9
2040	1.61	80.4	85.4	25.7
2050	1.64	82.0	86.7	25.4
2060	1.67	83.4	87.8	24.6
2065	1.68	84.0	88.3	23.9

Source: B. Burcin and T. Kučera: Prognóza populačního vývoje České republiky na období 2003–2065 [Prognosis of Population Development in 2003–2065].

[21] The FSChU (Faculty of Science of Charles University) prognosis was completed in September 2003, and is based on the results of the census in 2001. It was used because it covers a longer timeline, which is very important for pension system projections.

[22] This is the mean variant.

The results of this demographic prognosis suggest that in the next 60 years there will be significant changes in the demographic structure of the population in the Czech Republic. These changes will be caused by the ongoing process of population ageing, which can be attributed to falling mortality and low fertility.

According to forecasts, the total number of inhabitants should continue to rise and peak in about 2025, when the number of inhabitants will be approximately 2% higher than in 2002. There should then be a sharp decline. The current population should be achieved again in about 2040, and the decline should continue until the population is below 9.7 million, i.e. roughly 95% of the current number and 93% of the population recorded in about 2025.

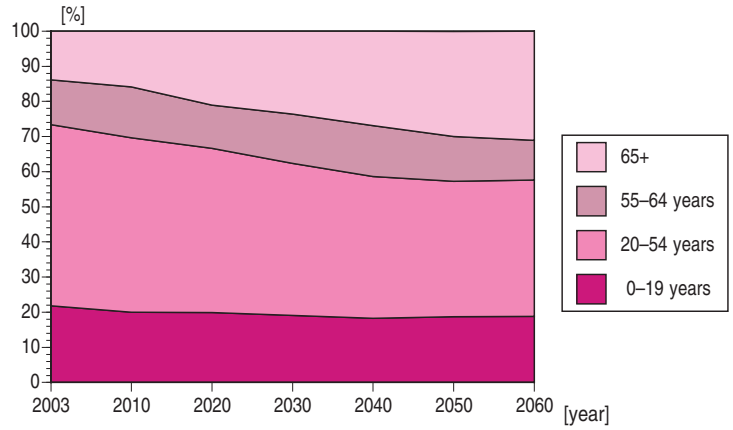
This decline however, will not be distributed evenly throughout the age groups; there will be a sharp decline in persons in younger age groups, which will be partially countered by a rise in the number of elderly persons. The number of persons in the group up to 20 years old will fall in the next 60 years by roughly 400,000 (i.e. by about 20%); the most radical decline will occur up to 2010, when this group will narrow by 160,000. In the case of persons of an economically active age (between 20 and 60), there will be a fall from the current number of roughly six million to just under 4.5 million (i.e. by about 30%), and this group will be hardest hit by future demographic developments.

Table 49. Structure of the population by sex and age group

	2003	2010	2020	2030	2040	2050	2060
Number of inhabitants [thousands of persons]	10,214	10,305	10,404	10,376	10,231	10,065	9,854
Age structure [%]							
Men:	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
0-19	23.0	21.2	21.1	20.3	19.4	19.8	19.8
20-54	53.5	51.4	48.3	44.8	42.1	40.4	40.5
55-64	12.4	14.3	12.3	14.1	14.4	12.8	11.5
65 -	11.1	13.2	18.2	20.8	24.1	27.1	28.2
Women:	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
0-19	20.7	18.9	18.7	17.9	17.3	17.7	17.8
20-54	49.7	47.9	45.2	41.8	38.6	36.9	37.2
55-64	12.9	14.7	12.3	14.0	14.6	12.6	11.0
65 -	16.7	18.5	23.8	26.4	29.6	32.8	33.9
Both sexes:	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
0-19	21.8	20.0	19.9	19.1	18.3	18.7	18.8
20-54	51.6	49.6	46.7	43.3	40.3	38.6	38.8
55-64	12.7	14.5	12.3	14.0	14.5	12.7	11.3
65 -	14.0	15.9	21.1	23.7	26.9	29.9	31.1

Source: B. Burcin a T. Kučera: Prognóza populačního vývoje České republiky na období 2003–2065 [Prognosis of Population Development in 2003–2065].

Graph 16. Structure of the population by age group



C.1.3. DEVELOPMENTS IN THE LEVEL OF ECONOMIC ACTIVITY

The forecast developments in the rate of economic activity are based on the current distribution of economic activity in individual age cohorts; this structure is influenced in the projection only by measures implemented in the pension insurance system (mainly by movements in the age limit for an entitlement to an old-age pension).

Table 50. Forecast developments in the rate of economic activity (age group: 20-70 years)

Year	Current rate	Age limit increased to 65	Age limit increased to 67
2010	71.8	71.8	71.8
2020	73.9	74.7	74.7
2030	73.9	77.4	77.4
2040	70.3	74.3	76.2
2050	71.2	74.9	78.5
2060	72.3	75.7	79.0

Source: Czech Statistical Office, Ministry of Labour and Social Affairs.

Movements in the age limit will have the greatest impact on the rate of economic activity in the age groups between 55 and 65 (or 70) years old.

Table 51. Forecast developments in the rate of economic activity (age group: 55-70 years)

Year	Current rate	Age limit increased to 65	Age limit increased to 67
2010	38.0	38.0	38.0
2020	42.5	44.8	44.8
2030	47.0	56.8	56.8
2040	42.1	52.5	57.7
2050	42.1	52.4	62.5
2060	42.4	52.3	62.1

Source: Czech Statistical Office, Ministry of Labour and Social Affairs.

C.2. PENSION INSURANCE[23]

C.2.1. PROJECTION OF KEY INDICATORS

The key indicators of the pension insurance system include

- Developments in the number of contributors and pensioners
- Developments in the ratio of the average old-age pension to the average wage
- Developments in revenues and expenditure.

C.2.1.1. Developments in the number of contributors and pensioners

The number of premium payers in a particular year is determined by the demographic structure of the population, the rate of the economic activity in individual age groups (or the average economic activity in the population) and, of course, the unemployment rate in the given year. The unemployment rate is significant more from the short-term view, because in the long term the effect of demographic development predominates. Graph 17 shows the development in the number of contributors in the three variants for a change in the age limit for an entitlement to an old-age pension, i.e. 63 and 59-63 years (current legislation), 65 years, and 67 years, such being at the same momentum as that at present. The age limit is being raised by two months for men and by four months for women every year; among women who already have the same age limit as men, the limit would be raised at the same pace as for men (Equation C.1). For example, men will reach an age limit of 63 years in 2016 and childless women in 2019. The vari-

[23] All calculations are based on the situation at the end of 2003 and do not take into consideration the adjustment to reduction limits and pension valorization for 2004 in accordance with the real situation, but in accordance with the rules specified for individual projections.

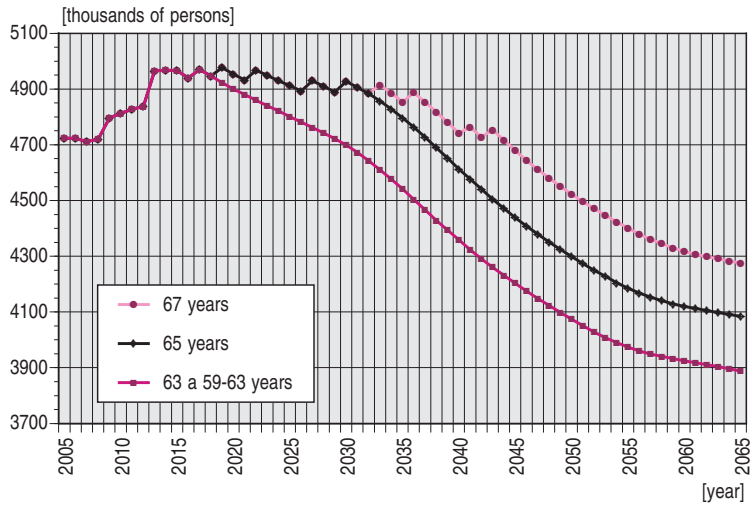
ants for the change in the age limit have been selected to reflect the current legislative situation (63 and 59 –63 years), the situation common in developed countries (65 years) and the process of longer survival (67 years). In the option of 67 years, the demographic shock caused by the switch of the generations born at the turn of the 1960s and 1970s to an old-age pension will still not be eliminated. This demographic shock (as discussed below) should probably not be removed by means of another rise in the age limit for an entitlement to an old-age pension.

Equation C.1. Statutory retirement age

$$vh_x = vh_s + \sum_{t=1996}^{x+vh_s} v_t \quad \text{, where}$$

vh_x = age limit for an insured person born in x,
vh_s = age limit in accordance with Section 32(1) of Act No. 155/1995 (i.e. 60 years for men and 53 – 57 years for women),
v_t = change in the age limit in t (i.e. 2 or 4 months).

Graph 17. Number of contributors (thousands of persons)

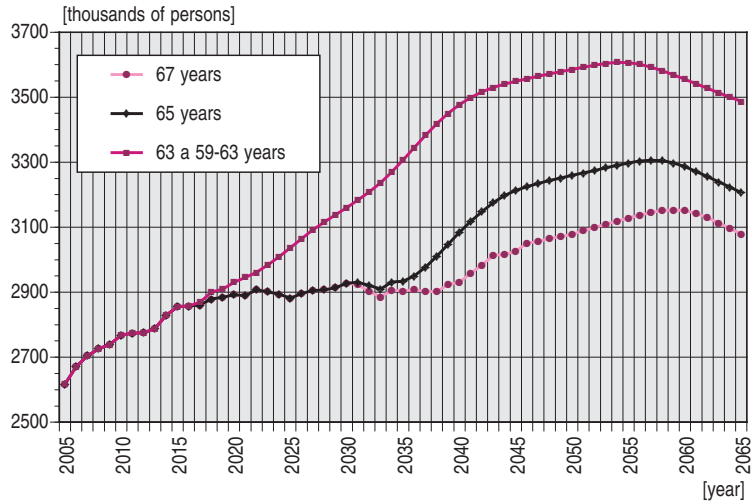


Source: Ministry of Labour and Social Affairs.

The number of pensioners is given (in line with the demographic structure) primarily by an age limit which determines the potential number of old-age pensioners. Other factors such as the disability rate do not have such a fundamental impact. Graph 18 and Graph 19 reveal developments in the number of pensioners, as total pensioners and as old-age pensioners only. Again, the three variants for

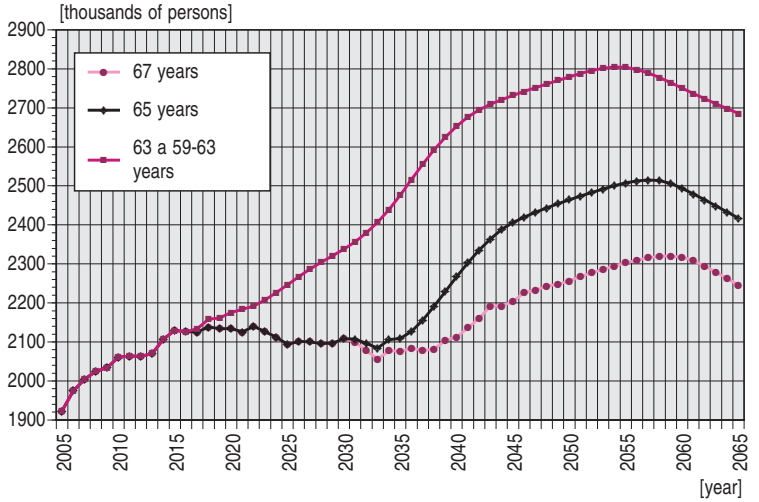
the shift in the age limit for an entitlement to an old-age pension, as mentioned above, are used here.

Graph 18. Number of pensioners (thousands of persons)



Source: Ministry of Labour and Social Affairs.

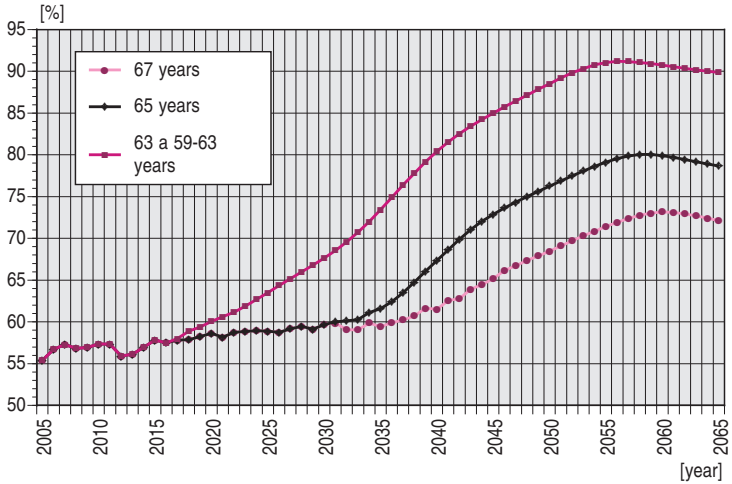
Graph 19. Number of old-age pensioners (thousands of persons)



Source: Ministry of Labour and Social Affairs.

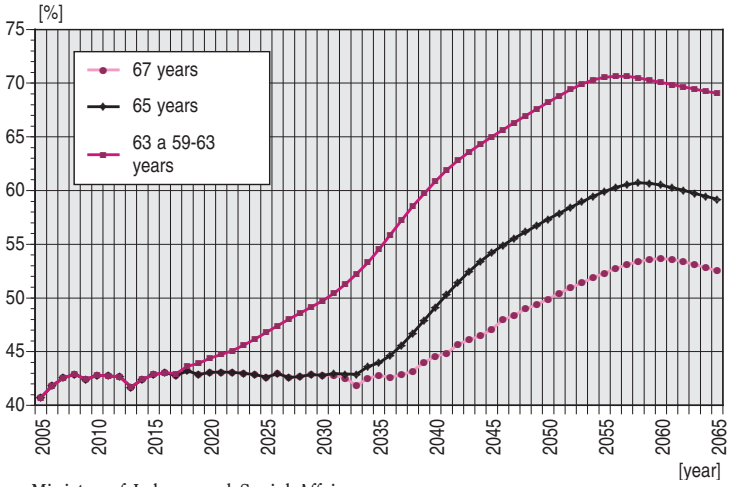
The decisive factor for the future balance of the pension insurance system (PAYGO) is not the development in the number of contributors or pensioners, but developments in the dependence rate, i.e. the ratio of the number of pensioners to the number of contributors (Graph 20 and Graph 21).

Graph 20. Dependence rate



Source: Ministry of Labour and Social Affairs.

Graph 21. Dependence rate – old-age pensions



Source: Ministry of Labour and Social Affairs.

The graphs above make it clear that the gradual rise in the age limit for an entitlement to old-age pensions could considerably eliminate the impact of expected ageing among the Czech population. At the same time, it can be seen that the termination of the shift in the age limit will lead to a sharp rise in the dependence rate.

C.2.1.2. Ratio of the average old-age pension to the average wage

The ratio of the average old-age pension and average wage is given by the level of newly granted pensions in relation to previous income (the compensation ratio (Equation C.7.)) and the amount of the valorization of current pensions (in relation to the wage rise), and to a certain extent by the decisions of individuals to take early, normal, or deferred retirement. The level of the compensation ratio is determined by the pension equation for the calculation of newly granted pensions (Equation C.2), where certain components (especially reduction limits) are adjusted every year by a government decision, with considerably free rules for this decision-making. For further calculations, we will assume that the average compensation ratio does not change over time (the impact of changes will be analyzed later), which can be achieved by various combinations of adjustments to reduction limits and the basic pension assessment.

Equation C.2. Calculation of a pension granted when a contributor reaches a set age limit[24]

$$npd = pvd + zvd$$

$$pvd = \{ovz \times rr_1 - \max(0, ovz - rh_1) \times (rr_1 - rr_2) - \max(0, ovz - rh_2) \times (rr_2 - rr_3)\} \times \text{int}\ (DP_1 + DP_2 \times 0{,}8)/365) \times ar$$

$$ovz = \frac{\sum_{y=Y-1-\min(30,Y-1-1986)}^{Y-1} RVZ_y \times \prod_{x=y}^{Y-1} w_x}{\min(30, Y-1-1986) - VD/365}$$

$$w_x = m_{x+1} / m_x \quad \text{, where}$$

npd = newly granted pension,
pvd = percentage assessment of pension,
zvd = basic assessment of pension (1,310 CZK),

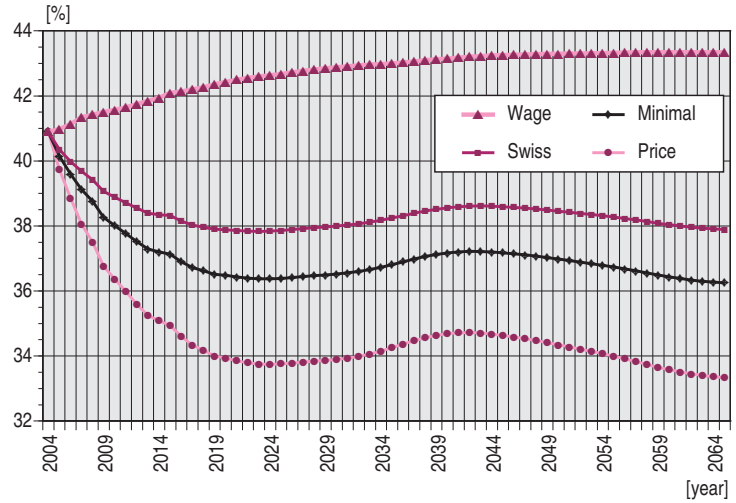
[24] This is the annual amount of the pension, with allowance for a certain degree of simplification.

ovz = personal assessment base,
rr_1 = 100%, rr_2 = 30%, rr_3 = 10% - amount of the *ovz* credit,
rh_j, j = 1,2 - the first and second reduction limit at the annual amount,
DP_j, j = 1,2 - the duration of insurance and the substitute insurance period, assessed at 80% on days prior to the age limit (only the full 365 days are included in the calculation),
ar = percentage per year of insurance (1.5%),
Y = year in which pension granted,
RVZ = annual assessment base,
w_x = converting coefficient for the adjustment of the general assessment base (whereby $w_{Y-1} = 1$),
VD = number of excluded days,
m_x = average monthly wage in the national economy in the first half of the year x.

Considering the above-mentioned circumstances, the ratio of the average pension to the average wage is only influenced by the amount by which the existing pensions are valorized (we do not consider a change in the retirement structure). The following graph (Graph 22) reveals developments in the ratio of the average pension to the average wage with the different types of pension valorization (with an increase in the age limit to 63 and 59-63 years). There is a certain simplification here in that it is assumed that all current pensions are valorized by the same percentage. Differing valorizations of the basic and percentage pension assessment (e.g. with zero valorization of the basic assessment) lead to different increases of pensions of various amounts.[25] A higher momentum of increases in the percentage pension assessment leads to a disruption in the level of pensions during the period over which they are paid and vice versa.

[25] The minimum levels stipulated in the law relate to the average pension payable.

Graph 22. The influence of valorization on the ratio of the average old-age pension to the average wage[26]



Source: Ministry of Labour and Social Affairs.

C.2.1.3. Developments in revenues and expenditure

Pension system revenues will rise based on a measure implemented in the framework of public budget reform, where the contribution rate for pension insurance has gone up from 26% to 28%. This measure will generate higher system income by roughly 0.6% of GDP. Another measure increasing the minimum assessment base for the self-employed will have an impact of approximately 0.1% of GDP. Revenues in relation to GDP are depicted in the following graph (Graph 23) and are the same for all variants.[27]

Expenditure on pensions depends primarily on movements in the age limit and the method used for the valorization of pensions (assuming that the compensation ratio remains the same). Graph 23 shows the two 'extreme' variants[28] of how pension expenditure could develop, i.e.:

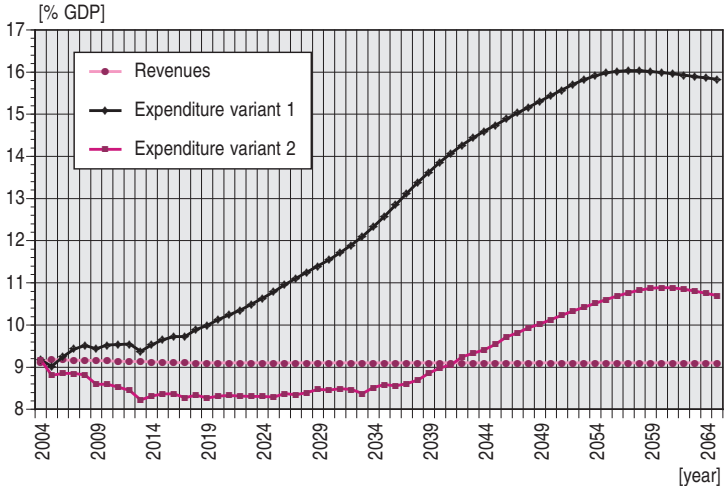
[26] Here we consider four methods of pension valorization, i.e. wage, Swiss (50% prices + 50% wages), minimum based on current legislation (fully in accordance with prices + a third of the growth in real wages), and merely price.

[27] This fact is based on project assumptions, where the rise in labour productivity is fully reflected in an increase in wages, and a rise in GDP is given by a rise in labour productivity and a change in the number of persons (employees + self-employed).

[28] From the above-mentioned projections.

Variant 1. A rise in the age limit to 63 and 59-63 years with wage valorization
Variant 2. A rise in the age limit to 67 years with price valorization

Graph 23. Revenues from premiums and expenditure on pensions (as a % of GDP)



Source: Ministry of Labour and Social Affairs.

C.2.2. EVALUATION OF DEVELOPMENTS IN KEY INDICATORS

The forecast ageing of the Czech population, characterized by falling mortality, will place increasing pressure on the pension system. In the projected period two strong generations will retire (the post-war generation and the generation from the turn of the 1960s and 1970s). The post-war generation, which is followed by the strong generation at the end of the 1960s and beginning of the 1970s, does not seem to be as great a problem for the pension system as the strong generation from the 1960s/1970s; for this generation, it will be necessary to create a financial reserve to fund their pensions, or there will necessarily be an increase in expenditure on pensions in relation to GDP. In general, it can be said that the set momentum for increases in the retirement age (if their process were to end at a limit of 63 or 65) generally eliminates the effects of ageing on the dependence rate in the pension system.

The various methods of valorizing current pensions have a short-to-medium-term effect (approximately 15 years) and lead to the establishment of a new ratio of pensions to wages. This instrument cannot be used to resolve the long-term increasing imbalance in the system, but can resolve short- and medium-term fluctuations. As is evident from the graph (Graph 22) during the valorization of

pensions based solely on prices the average pension becomes stable at a level of roughly 34% of the average wage. After this, price valorization has no effect. The force of the effect of valorization is therefore given primarily by previous valorizations and the related structure for the amount of pension payable.

Developments in expenditure on pensions in relation to GDP (with consideration for the expectations of projections, changes on the part of revenues[29] are also reflected in the expenditure ratio) are dependent on many measures, whether in the framework of current legislation or a change in the law (in particular movement in the retirement age). The last graph (Graph 23) shows clearly that, with the help of standard measures used for the PAYGO pension system, it is possible to prevent an explosion of expenditure by making a certain reduction in the rate of income compensation under this system.

C.2.3. ANALYSIS OF THE SENSITIVITY OF THE PENSION INSURANCE SYSTEM IN RELATION TO POSSIBLE PARAMETRIC ADJUSTMENTS

We will assess the sensitivity of the pension insurance system from the aspect of long-term financial viability and from the aspect of the sufficiency of the pensions provided.

From the aspect of financial viability, we will assess the system by means of the following:

- implicit pension debt,
- the contribution rate required.

From the aspect of the sufficiency of benefits, we will assess the system by means of the following:

- replacement rate,
- total pension payable.

C.2.3.1. Financial viability

We will assess the long-term financial viability of the pension system by means of the implicit debt, which we define as the difference between the current value of future expenditure on pensions and the current value of future revenues from premiums[30] (Equation C.3).

[29] Besides changes in the contribution rate and the premium collection rate.
[30] This is not a general definition of implicit debt, but one of many.

Equation C.3. Implicit pension debt[31] (IPD)

$$IPD_x = \left(\sum_{t=x}^{T} RR_t \times M_t \times PD_t \times (1+\delta)^{-(t-2005)}\right) - \left(\sum_{t=x}^{T} PS_t \times M_t \times PP_t \times (1+\delta)^{-(t-2005)}\right)$$

$$RR_t = D_t / M_t \text{ , where}$$

IPD_x = implicit debt in x in 2005 values,
RR_t = ratio of the average pension to average wage in t,
PD_t = number of pensioners in t,
PS_t = contribution rate in t,
PP_t = number of contributors in t,
D_t = average annual pension in t,
M_t = average annual wage in t,
δ = interest rate.[32]

Because it would be difficult to project system evolution to infinity (theoretically $T = \infty$), we select a final point (T) of 2065 (the end of the demographic prognosis). The problem with this solution is that the system need not be balanced at the end of the projection, and the implicit debt is therefore higher because the projection continues to grow after the cut-off point. Another problem is that, using the same *IPD* up to 2065, the system in 2065 could be in a different situation and the overall *IPD* can therefore vary.

As a second indicator for assessments of the financial viability of the pension system, we use the 'required contribution rate' (Equation C.4.), which we will define as the contribution rate whereby the system is financially viable long term (i.e. $IPD = 0$).

Equation C.4. Required contribution rate

$$PS_x^p = \frac{\sum_{t=x}^{T} RR_t \times M_t \times PD_t \times (1+\delta)^{-(t-2005)}}{\sum_{t=x}^{T} M_t \times PP_t \times (1+\delta)^{-(t-2005)}} \text{ , where}$$

PS_x^p = the required contribution rate in x.

In the text below, we will analyze the impact of certain parametric adjustments on the amount of the implicit debt and the required contribution rate. First we will analyze the impact of individual parameters, and after that the combination in various scenarios. The **basic scenario** for further analyses is a rise in the age limit to 63 and 59-63 years (Equation C.1), the valorization of reduction limits and the basic pension assessment (Equation C.2) based on wages (i.e. keeping to a relative level in relation to wages) and the valorization of pensions paid out after 2005 entirely in line with wages (at a minimum level for 2005).

[31] Implicit debt is recalculated to the present value of 2005.

[32] We are counting on an interest rate of 4% p.a.

The first analyzed parameter will be the retirement age. Here we will count on four variants, i.e. an increase in the age limit at the current momentum to 63 for men and 59-63 for women (in accordance with current legislation), to 65 for all, to 67 for all, and a gradual rise throughout the whole projected period (Equation C.1).

Table 52. Influence of the age limit on the amount of IPD and PS[p] [33]

	63 and 59-63 years	65 years	67 years	Growth throughout period
Implicit debt (% of GDP)	193.9	127.9	98.2	82.3
Required contribution rate (%)	38.0	34.3	32.8	32.0

Source: Ministry of Labour and Social Affairs.

It is evident from the table that the age limit has a significant effect on the implicit debt and the required contribution rate. A continuation of the rise in the age limit to 67 for both sexes leads to a reduction in the implicit debt to half compared with the rise to just 63 for men and 59-63 for women.

Another parameter is the amount of valorization for current pensions. Here we consider four methods of pension valorization, i.e. wage, Swiss (50% prices + 50% wages), minimum based on current legislation (fully in accordance with prices + a third of the growth in real wages), and merely price (Graph 22).

Table 53. Influence of the method of pension valorization at the amount of IPD and PS[p]

	Wage	Swiss	Minimum	Price
Implicit debt (% of GDP)	193.9	133.8	115.4	82.3
Required contribution rate (%)	38.0	34.9	33.9	32.2

Source: Ministry of Labour and Social Affairs.

[33] With a higher rise in the age limits while keeping to the current parameters of non-old-age pensions (especially the rates of disability in age cohorts), a more significant imbalance is generated in the field of non-old-age pensions (up to 0.8% of GDP per annum). Assuming there is a decline in the disability rate connected with a fall in mortality, the implicit debt would be much lower. However, this change is very difficult to estimate and therefore it is not analyzed.

We can see that the restriction in valorization solely to prices has the same effect as a rise in the age limit throughout the projected period. The effect stemming from the valorization of pensions is, however, highly dependent on a rise in real wages (the faster the growth in real wages, the stronger the effect stemming from a restriction in pension valorization).

The final parameters analyzed are parameters affecting the amount of newly granted pensions, i.e. the indexation of reduction limits and the valorization of the basic pension assessment (Equation C.2). Here, again, we have four variants. In all (besides the basic variant), it is assumed that the basic pension assessment will not be valorized. The reduction limits will be index-linked in accordance with the growth in wages, more slowly than the growth in wages, and faster than the growth in wages.

Table 54. Influence of adjustments to the pension equation parameters (Equation C.2) on the amount of IPD and PS[p]

	Basic scenario	Reduction limit based on wages	Reduction limit only at 80% of the wage growth	Reduction limit at 120% of the wage growth
Implicit debt (% of GDP)	193.9	112.5	42.9	185.6
Required contribution rate (%)	38.0	33.8	30.2	37.5

Source: Ministry of Labour and Social Affairs.

We can see that developments in the reduction limits and the basic pension assessment have a significant impact on the system's implicit debt. With the variant of reduction limit increases solely at 80% of the wage growth, the decline is the highest of all the variants we have studied so far.

Now we will compare three different scenarios: a basic scenario (described above), a scenario with a lower rise in the age limit and greater fall in the relative level of pensions, and the final scenario with a higher age limit and a lesser decline in the relative level of pensions (scenarios 2 and 3 should be variants of a financially sustainable system).

Scenario 2 assumes a rise in the age limit to 65 for both sexes, pension valorization using the Swiss method, zero valorization of the basic pension assessment, and the valorization of reduction limits based on wage growth.

Scenario 3 assumes a rise in the age limit at the same momentum until 67, pension valorization using the Swiss method, zero valorization of the basic pension assessment, and the valorization of the first reduction limit by 105% and the second reduction limit by 110% of wage growth.

Table 55. Possible reform scenarios

	Basic scenario	Scenario 2	Scenario 3
Implicit debt (% of GDP)	193.9	3.7	0.4
Required contribution rate (%)	38.0	28.2	28.0

Source: Ministry of Labour and Social Affairs.

Finally, we will look at the impact of the change in the method used to fund pensions, i.e. part of the collected premium will be capitalized. We will assume that, starting in 2005, half the collected premiums will be capitalized. We will adjust the equation for the calculation of IPD (Equation C.3) to Equation C.5.

Equation C.5. Implicit pension debt (2)

$$IPD_x = \left(\sum_{t=x}^{T} RR_t \times M_t \times PD_t \times (1+\delta)^{-(t-2005)}\right) -$$

$$\left(\sum_{t=x}^{T} PS_t / 2 \times M_t \times PP_t \times (1+\delta)^{-(t-2005)} + \left(\sum_{t=x}^{T} PS_t / 2 \times M_t \times PP_t \times \prod_{y=t}^{T} (1+\varphi)^{(y-2005)}\right)\right.$$

$$\left. \times (1+\delta)^{-(T-2005)}\right) \quad \text{, where}$$

φ = the rate of capitalization yield.

Table 56. Influence of the yield rate in partial capitalization on the amount of IPD and PS[p]

	No. capitalization	3% yield	5% yield
Implicit debt (% of GDP)	193.9	266.0	86.7
Required contribution rate (%)	38.0	43.7	31.7

Source: Ministry of Labour and Social Affairs.

Partial capitalization of contributions may lead to a reduction in the implicit debt in cases where the yield from capitalization is higher than the interest rate. The reduction in the implicit debt in this case is very significant (with a yield of 5.6%, i.e. by 1.6 percentage points above the interest rate, this system is financially viable up to 2065).

C.2.3.2. Sufficiency of benefits

We will assess the sufficiency of benefits by means of a compensation ratio, which we will define as the ratio of a newly granted pension to the wage just before retirement. For this evaluation, we will use hypothetical insured persons; con-

sidering the differences in the age limits and the period of survival, we could use men who have been insured for 40 years and retire at 65 years, whose wage was at the level of the average wage.[34] Our basis will be an equation (Equation C.2), which we will divide by the last earnings. Here it should be added that, after reaching the age limit, for every full 90 days of insurance without a pension payment the pension increased by 1.5% of the calculation base[35] and that, over any period of early retirement, the pension is reduced by 0.9% of the calculation base for each 80 days inclusive before the age limit is reached. Therefore the following equation applies:

Equation C.6. Total percentage of the calculation base (CPVZ) (including cases of deferred or early retirement)

$$CPVZ = \text{int}((DP_1 + DP_2 \times 0{,}8)/365) \times 1{,}5 + \max(0,\ \text{int}((o - vh)/90)) \times 1{,}5 - \max(0,\ \text{int}((vh - o + 89)/90)) \times 0{,}9$$, where

o is the actual retirement age.

Equation C.7. Compensation ratio

$$NP_t = \frac{npd_t}{RVZ_{t-1}}$$, where

npd_t = newly granted pension in t (see Equation C.2),
NP_t = compensation ratio in t.

We will assess the same insured person from the aspect of the total pension paid out over the duration of the pension collection. We will define this indicator as the current value of paid pensions to a single pensioner over the duration of pension collection. This indicator is influenced to a certain extent over time by the relationship of price growth, wage growth, and the interest rate (a higher wage growth leads to higher total pension payout).[36]

[34] The use of a hypothetical insured person makes it possible to compare changes in the pension system independently of the expected behaviour outside this system. The age of 65 has been selected intentionally so that a pension may be granted even if the statutory retirement age is 67.

[35] This is a reduced ovz under Equation C.2.

[36] Because $(1 + \beta) = (1 + x \times \pi) \times (1 + y \times \omega)$, where x is the rate for the consideration of a price rise, y is the rate for the consideration of a rise in real wages, π is the price rise and ω is the rise in real wages.

Equation C.8. Total pension paid (CVD)

$$CVD = npd \times (1 + (\sum_{t=1}^{d_x} (\prod_{y=1}^{t} (1 + \beta_y)) \times (1 + \delta)^{-t}))$$, where

d_x is the average period for the collection of a pension granted at the age of x,
β = the amount of pension valorization.

First, as in the previous chapter, we will assess the impact of a rise in the age limit (all impacts and evaluations relate solely to old-age pensions). At issue here are three different variants of development, i.e. a rise in the age limit to 63 and 59 – 63 years (current legislation), to 65, and to 67 years (Equation C.1).

Table 57. Influence of the shift in the age limit on the compensation ratio (%)

	63, 59-63 years	65 years	67 years
2010	52.9	52.9	52.9
2020	50.1	49.2	49.2
2030	50.1	44.6	44.6
2040	50.1	44.6	40.7
2050	50.1	44.6	39.6
2060	50.1	44.6	39.6

Source: Ministry of Labour and Social Affairs.

Table 58. Influence of the shift in the age limit on the total pension paid, as a multiple of the last annual income[37,38]

	63, 59-63 years	65 years	67 years
2010	9.7	9.7	9.7
2020	9.3	9.1	9.1
2030	9.8	8.7	8.7
2040	10.3	9.2	8.4
2050	10.8	9.6	8.5
2060	11.2	10.0	8.9

Source: Ministry of Labour and Social Affairs.

[37] = CVD_t / RVZ_{t-1}

[38] The impact of various wage developments on CVD can be shown with the age limit of 67. While 8.9 is specified in the table, in the case of the same wage developments after 2060 as after 2010 this value would be 9.5.

If the age limit rises, the compensation ratio for pensions granted at the same age falls. This is caused by the increase or reduction in pension based on deferred or early retirement and by the relationship between the actual retirement age and the age limit. In the case of CVD, the fall in the compensation ratio is compensated (fully or partially) by growth in the average duration of pension collection.

Another parameter is the method used to valorize pensions. The method of valorization used for current pensions has no influence on the compensation ratio, but only on CVD. Again, we have four variants of valorization: wage, Swiss, minimum, and price.

Table 59. Influence of the method of valorization on the overall pension paid out, as a multiple of the final annual income

Year	Wage	Swiss	Minimum	Price
2010	9.7	8.9	8.7	8.2
2020	9.3	8.6	8.3	7.9
2030	9.8	9.0	8.8	8.3
2040	10.3	9.4	9.1	8.6
2050	10.8	9.8	9.5	8.9
2060	11.2	10.2	9.9	9.2

Source: Ministry of Labour and Social Affairs.

The last parameters analyzed here are parameters influencing the amount of newly granted pensions, i.e. the indexation of reduction limits and the valorization of the basic pension assessment (Equation C.2). Here, again, we have four variants. In all (besides the basic variant), it is assumed that the basic pension assessment will not be valorized. The reduction limits will be index-linked in accordance with the growth in wages, more slowly than the growth in wages, and faster than the growth in wages.

Table 60. Influence of adjustments to the pension equation parameters (Equation C.2) on the compensation ratio (%)

Year	Basic scenario	Reduction limit based on wages	Reduction limit only at 80% of the wage growth	Reduction limit at 120% of the wage growth
2010	52.9	50.7	49.4	52.0
2020	50.1	46.0	42.8	47.3
2030	50.1	44.9	41.0	46.8
2040	50.1	44.1	39.5	46.5
2050	50.1	43.6	38.5	46.2
2060	50.1	43.2	37.8	46.0

Source: Ministry of Labour and Social Affairs.

Table 61 Influence of adjustments to the pension equation parameters (Equation C.2) on the overall pension paid out, as multiples of the last annual income

Year	Basic scenario	Reduction limit based on wages	Reduction limit only at 80% of the wage growth	Reduction limit at 120% of the wage growth
2010	9.7	9.3	9.1	9.5
2020	9.3	8.5	7.9	8.7
2030	9.8	8.8	8.0	9.2
2040	10.3	9.1	8.1	9.6
2050	10.8	9.4	8.3	9.9
2060	11.2	9.7	8.5	10.3

Source: Ministry of Labour and Social Affairs.

C.2.3.3. Transformation deficit and debt

A transformation deficit (theoretically a transformation surplus too) emerges in PAYGO pension systems when there are changes on the part of the system contributors (e.g. by means of the introduction of an upper limit for the premium assessment base) which are reflected in the amount of pensions (i.e. in expenditure) for those persons where these changes occurred. These changes lead to the establishment of temporary imbalance between revenues and expenditure in the system (a deficit). The transformation deficit is mentioned most frequently in connection with the conversion from a PAYGO system to a capital financed system (generally speaking, these are situations where the premium rate is reduced for insured persons with a subsequent decline in the future amount of the pension).

We will then define the transformation debt as the present value of the transformation deficits.

The amount of transformation deficits or the transformation debt is independent of the equilibrium or imbalance of the pension system as such, and therefore they cannot be reduced by any system adjustments. However, this does not mean that the pension system must have a deficit during a transformation period (or a deficit corresponding to a transformation deficit), because transformation deficits (or the transformation debt) can be financed through the unpaid pensions of existing pensioners.

The following table (Table 62) shows the amount of transformation debts with different variants of the conversion to the fund system for old-age pensions. The variants are differentiated by the amount of the rate paid to the fund system (or not paid to the pay-as-you-go system). Full conversion occurs at a rate of 20%.

Table 62. Amount of the transformation debt with conversion to a fund system (% of GDP)

Rate to the fund system	5%	10%	20%
Transformation debt	64.0	122.6	238.7

Source: Ministry of Labour and Social Affairs.

The table reveals that full conversion to a PAYGO pension system to a capital financed pension system would require costs amounting to a multiple of just under 2.5 times the annual GDP.

C.2.4. CONCLUSIONS

From the projections made above, it ensues that the pension system in its current form is highly flexible and allows us to (or compels us to) make continual modifications that can stabilize the system in the short and long term (Table 55). On the other hand, they can also lead to an explosion in general expenditure. The above-mentioned system flexibility also places a burden on the opportunities of creating a demographic reserve to improve inter-generational equity in the pension system (weak versus strong generations).

The existence of strong and weak generations in the population can result in a certain inter-generational injustice if we attempt to equalize the PAYGO system every year (by means of various parameter adjustments). Graph 24 reveals the impact of the existence of a strong generation[39] in a stable population[40] in a pension system,[41] which is equalized every year and in a system which creates a demographic reserve. An annually equalized pension system will increase the level of pensions[42] when a strong generation enters the labour market (in our case in the twentieth year of the projection) and subsequently, when this generation retires (in our case after the sixtieth year of the projection) the level of pensions will fall to under the original level and will then gradually return to the initial level (when the last member of the strong generation dies). We can see that with this system structure the strong generation finances the higher pensions of 'its parents' but then obtains markedly lower pensions itself. With a structure that creates a demographic reserve (the method used to calculate the pension does not change and

[39] In the first five years, double the number of children are born.

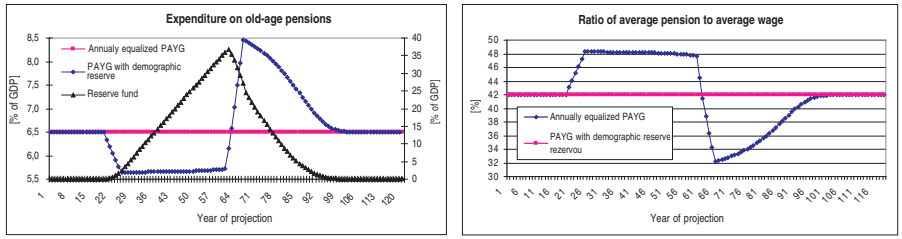
[40] By 'stable population' we mean a population with a constant mortality in individual age groups.

[41] This is a simplified illustrative example.

[42] A 'temporary' reduction or increase in the age limit has a similar effect. In place of the increase in pensions, there can be a reduction in the age limit, which subsequently forces a radical increase in this limit (this development can be tracked in the development of pension systems in a number of developed countries).

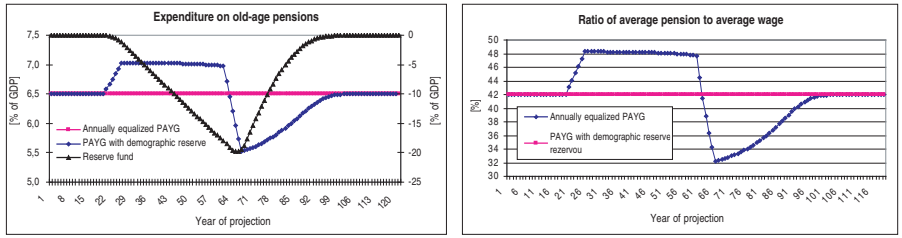
the ratio is therefore stable), when a strong generation enters the labour market there is a fall in the level of expenditure and a reserve is formed[43] which is subsequently exhausted by increased expenditure when the strong generation retires. The same process applies accordingly to weak generations[44] (Graph 25).

Graph 24. Impact of the existence of a strong generation in a stable population on expenditure and on the level of pensions



Source: Ministry of Labour and Social Affairs.

Graph 25. Impact of the existence of a weak generation in a stable population on expenditure and the level of pensions



Source: Ministry of Labour and Social Affairs.

From this aspect, interesting features are the comparison of developments as shown in variant 2 in Graph 23 and the simulation as set forth in the graph above (Graph 24).

From the aspect of system income, the diversification of sources seems to be potentially advantageous. This diversification, connected with the partial capitalization of contributions, may lead to a significant reduction in the system IPD (Table 56) and to an increase in the inter-generational equity in the system. This change need not necessarily be connected with a system change on the part of

[43] For the sake of simplification, it is assumed that reserve fund revenues (or debt costs) are at the same level as the rise in GDP.

[44] In the first five years of the projection, half the number of children are born.

benefits[45] (or expenditure) and therefore the need to cover transformation costs (Table 62).

On the part of pension system expenditure, an important parameter is the retirement age. By adjusting this parameter we can respond directly to changes in the demographic structure without the need for a major reduction in the amount of pensions. It is evident from projections (Graph 20 and Graph 21) that the momentum selected for increases in the age limit essentially reflects demographic changes.

The method and amount of pension valorization is another parameter influencing the expenditure side of the system. The fact that it influences the amount of all payable pensions can have a very strong effect that is reflected in particular in a shorter period (Graph 22 and Table 59). Therefore it can be used well to resolve short-term fluctuations and to bring the system into a balance in the given year, whereby there could be inter-generational inequity.

From what is mentioned above, it ensues that the reform processes selected respond to future changes whereby a fundamental problem for future development will be the strong generation at the end of the 1960s and the start of the 1970s, the transfer of which from economic activity to retirement (Graph 21) will place severe pressure on system expenditure (Graph 23). The use of standard modifications (a fall in the relative level of pensions or another increase in the age limit) which could lead to the annual equalization of the system seems rather unfair for this generation (Graph 24).[46]

[45] The capitalization of part of paid contributions need not mean 'savings' (i.e. conversion from DB to DC plans) and the creation of another system pillar; it can mean the preservation of 'insurance' (i.e. DB plans which can be found in the Netherlands or Switzerland), even in the current (or modified) form regulated by Act No. 155/1995.

[46] A lower pension simply because of membership of a strong generation.

C.3. SICKNESS INSURANCE

C.3.1. LONG-TERM PROJECTIONS AND EVALUATIONS OF DEVELOPMENT

The balance of sickness insurance depends on the amount of the assessment bases for premiums and for benefits, on the premium rate, on the collection rate, on the sickness rate, and on the structural parameters. A projection of premium payers and benefit recipients is not a key informative element for long-term projections of sickness insurance indicators because, unlike pension insurance, in the sickness insurance system the group of premium payers and benefit recipients is roughly the same.

The **number of sickness insurance contributors and beneficiaries** is determined by the demographic structure of the population and the economic activity in the different age groups. Another significant factor is unemployment. Because the self-employed can choose whether or not to participate in sickness insurance and because of the different methods used to set premiums for employees and the self-employed, in our projection we differentiate two groups of insured persons. The share of voluntary insured self-employed persons in the total number of pension insured self-employed persons is gradually falling – from 58% in 1997 to 45% in 2003. Legislative changes also have an influence on the number of voluntarily insured self-employed persons. It is expected that, in connection with the reform of public budgets, which will gradually increase the premium assessment base for the self-employed up to 2006, of the total number of pension insured self-employed persons, only 40% to 30% (i.e. approximately 250,000 people) will take out sickness insurance voluntarily. Developments in the number of premium payers, like the number of benefit recipients, will copy developments in the number of pension insurance premium payers in 2005-2065, as specified in Chapter C.2.1 (Graph 17). The overall absolute number of sickness insured persons will, however, be lower by those self-employed who opt out of voluntary sickness insurance, i.e. by about 400-500,000 people.

Revenues from sickness insurance premiums depend on the number of contributors, the amount of the assessment base, the insurance rate, and the collection rate. Therefore, developments in sickness insurance revenues in 2005–2065 will have the same trend as that specified in Chapter C.2.2 (Graph 23) – the absolute amount will differ only depending on the set amount of the contribution rate.

In **expenditure** on sickness insurance, new measures will usually be fully manifested very quickly, and therefore long-term projections are not as important here as in the pension insurance system. **Therefore short-term projections are preferred.**

C.3.2. SHORT-TERM PROJECTIONS AND AN ANALYSIS OF THE SENSITIVITY OF THE FINANCIAL BALANCE OF SICKNESS INSURANCE TO CHANGES IN KEY INDICATORS

In 2004, the government approved the general principle of a Sickness insurance Bill (Resolution No. 104); in June 2004, the government adopted Resolution No. 604 in respect of proposals to resolve certain problems connected with the preparation of the Sickness insurance Bill (it appointed the parameters for the structure of benefits).

The principal objectives of the Sickness insurance Bill include the creation of requirements for balanced income and expenditure of the sickness insurance system. The basic factors influencing this balance are developments in work incapacity and the amount of benefits. An expedient way of influencing this development is to motivate employers and insured persons to draw less on sickness insurance benefits. The new law wants to achieve this by incorporating employers into the system, whereby they will have to pay a replacement wage for working days at the initial stage of sick leave, and by changing the structure of benefits.

It is proposed that in the first 14 calendar days of sick leave and quarantine, the replacement wage paid for working days should be covered by employers, and at the same time employers should have their premium rate reduced. By preserving the premium rate for employees at 1.1%, it will be possible to set the premium rate for employers at 1.6%, i.e. a reduction from the current 3.3% by 1.7 percentage points. Expenditure on the wage replacement for the first 14 days of sick leave for the average employer will only be 1.01% of the volume of assessment bases. Higher expenditure on the payment of the wage replacement than the savings made from the reduction in the premium rate can be expected in companies with a much higher frequency of sick leave than the national average. Among companies with the same sickness rate, companies with a higher level of wages will be better off.

A rough overview of how the reduction or increase in the sickness rate will affect the financial impact of the wage replacement on employers is given in Table 63. The financial impact on the employer is expressed here in the percentage of the current amount of sickness insurance payments (100%) and on the assumption that the replacement wage will be at 25% of the daily assessment base for days 1 to 3 of the sick leave and 60% of the daily assessment base from day 4 of the sickness. Therefore, if an organization has an average sick leave percentage of 8% and the average wage is a multiple of 0.7 of the national average, then the employer's expenditure on premiums and on the replacement wage will increase compared with the currently paid premiums to a level of 104%, i.e. by four percentage points. If, however, the sickness rate at this organization is reduced and the average rate of sick leave falls to 6%, the employer's expenditure on premiums and on the wage replacement is only 89% of the current amount of sickness insurance payments.

Table 63. Influence of the sickness rate on employers' balances

Multiple of average wage	With an average sick leave percentage of									
	1%	3%	5%	6%	7%	8%	9%	11%	13%	15%
0.7	55	68	82	89	97	104	112	127	144	161
1	55	69	83	91	98	106	114	130	147	165
1.5	53	62	72	76	81	87	92	103	114	126
2	51	56	62	64	67	70	73	79	86	93
3	50	53	56	57	59	60	62	66	69	73
3 or more	49	50	51	51	52	53	53	54	55	57

Source: Ministry of Labour and Social Affairs.

When calculating figures for the different amounts of the average sick leave percentage, the basis we used was the assumption that a change would occur as a result of a change in the number of cases while retaining, relatively, the same distribution of the length of sick leave. If there were a reduction in the sickness rate mainly as a result of a reduction in short-term sickness (up to 14 days), the given financial impacts for the employer would be more favourable. It is also evident from the table that the changes in the sickness rate have a substantial financial effect among organizations with lower earnings, which is influenced by a reduction in the assessment bases when setting the amount of benefits from higher earnings.

The approved proposal of the parameters for the structure of sickness benefits and wage replacements is given in the following overview.

Table 64. Principal changes in the setting of sickness insurance benefits

Measure	Current legislation as of 1 January 2004	Proposal
Decisive period	12 months	12 months
Reduction in the DVZ (daily assessment base):		
Reduction limit (RH)	480 CZK and 690 CZK	One third of the amounts 1.0 - 1.5 - 3.0 multiple of VVZ*); for wage replacement: 7/5 of sicknessreduction limit
Reduction rate		
sickness	Day 1 to 14 90% - 60% - 0% Day 15+ 100% - 60% - 0%	
POČR	Day 1 to 14 90% - 60% - 0%	As of Day one
(nursing of family member)	Day 15+ 100% - 60% - 0%	90% - 60% - 30%
PPM (maternity)	As of day 1 100% - 60% - 0%	
Rate for daily benefit		
Sickness	For calendar days Day 1 to 3 25% Day 4+ 69%	Day 1 to 14 replacement wage for working days Day 1 to 3 25% PV*) Day 4+ 60% PV Day 15+ sickness benefits for calendar days 60% DVZ
Maternal	69%	As of day one 70% DVZ
Nursing	69%	As of day one 50% DVZ
Parallel employment	benefit from each	Only 1 benefit

*) VVZ = VVZ = general assessment base; PV = average earnings.

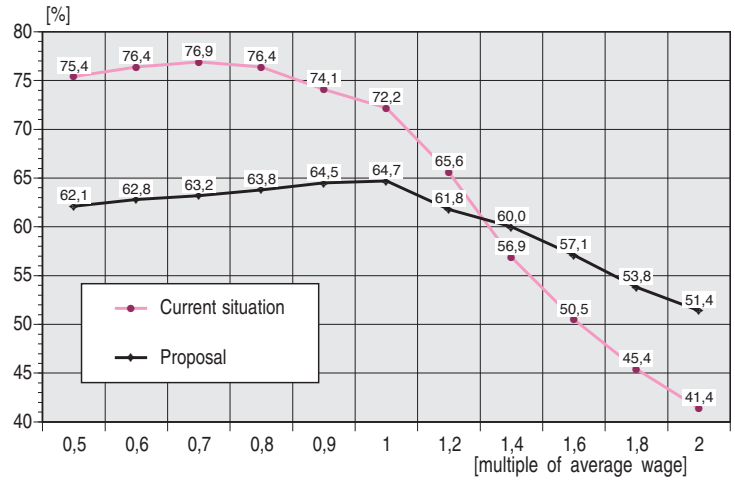
Sickness benefit

The new method used for the calculation of sickness benefit will lead to a reduction of expenditure on sickness benefits in 2006 (assuming a sickness rate of 6.2%) as of the fifteenth day of sick leave by 7%, i.e. by CZK 1.4 billion.

The compensation ratio (ratio of the amount of benefit to the net wage), as a result of the change in reduction limits and the sickness benefit rate, will increase among insured persons with higher incomes and will fall among insured persons with average and lower incomes. For example, when comparing the amount of the sickness benefit under current legislation in 2003 with the wage replacement and sickness benefit for the first 30 calendar days of sickness, among insured persons with below-average incomes (based on the proposal) there will be a reduction in the compensation ratio by 8-14 percentage points, whereas among insured persons with an income equal to 1.6 times the average wage the compensation ratio will increase by seven percentage points.

The compensation ratio for multiples of the average wage is shown in the following graph.

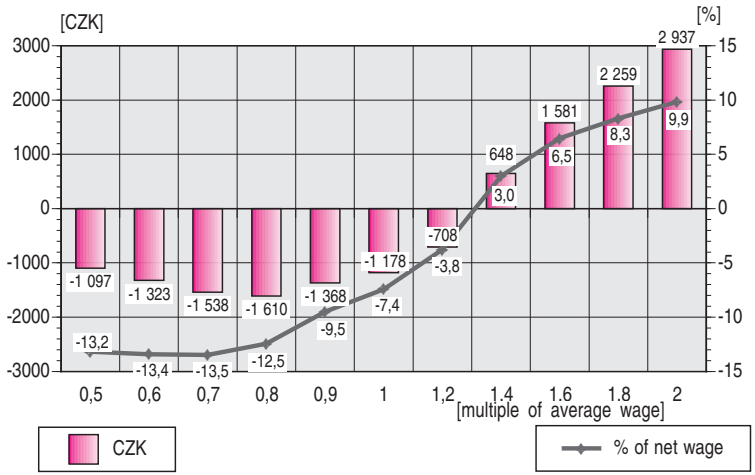
Graph 26. The ratio (in %) of the amount of the benefit* for the first 30 calendar days of sick leave to the net wage for various amounts of wages



* under current legislation, sickness benefit covers 30 days; under the bill, there is the sum of the wage replacement for the first 14 days and sickness benefit for the 16 subsequent days

For insured persons, the changes in the method used to calculate the wage replacement and sickness benefit will increase the income of those for whom the benefit is assessed from higher earnings and the sickness benefit will be reduced for those with lower earnings. Graph 27 shows the differences between the amount of sickness benefit under legislation in force in 2003 and the amount of the wage replacement and sickness benefit for the first 30 calendar days of the sickness.

Graph 27. Difference in the amount of the wage replacement and sickness benefit and the amount of the current sickness benefit for 30 days of sickness



Source: Ministry of Labour and Social Affairs.

Maternity benefit

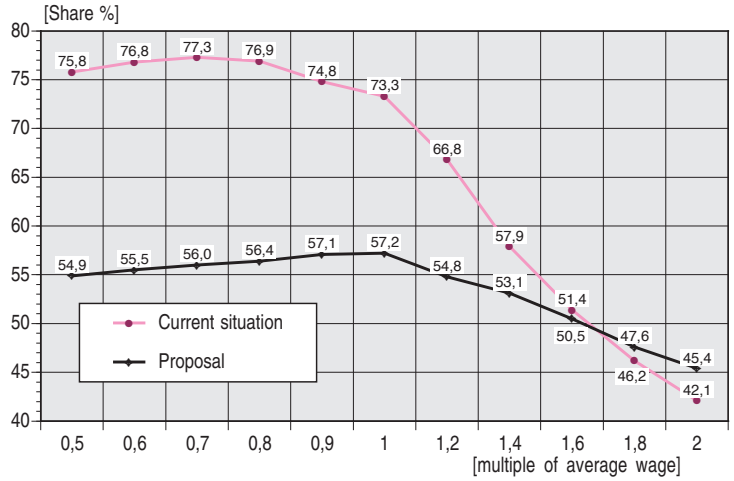
With maternity benefit, when setting the daily assessment base the same changes in reduction will be made as with sickness benefit. The percentage rate of the daily amount of the benefit, however, will increase from 69% to 70% of the reduced daily assessment base. The proposed method for the calculation of maternity benefit will lead to an increase in expenditure on this benefit in 2006 by 8.7%, i.e. by approximately CZK 394 million.

This calculation will mean a higher ratio of the benefit to the preceding wage (compensation ratio) for insured persons who paid premiums from higher incomes. For example, when comparing the amount of the new maternity benefit with the maternity benefit calculated under current legislation in 2003, among insured persons with below-average incomes there will be a reduction in the compensation average by 2-7 percentage points, whereas among insured persons with an income equal to 1.6 times the average wage the compensation ratio will increase by fifteen percentage points (see Graph 28).

For insured persons, the changes in the method used to calculate maternity benefit will lead to an increase in the benefit for those for whom the benefit is assessed from higher incomes, and will lead to a decrease in the benefit for insured persons with lower incomes. Graph 29 shows the difference between the benefit

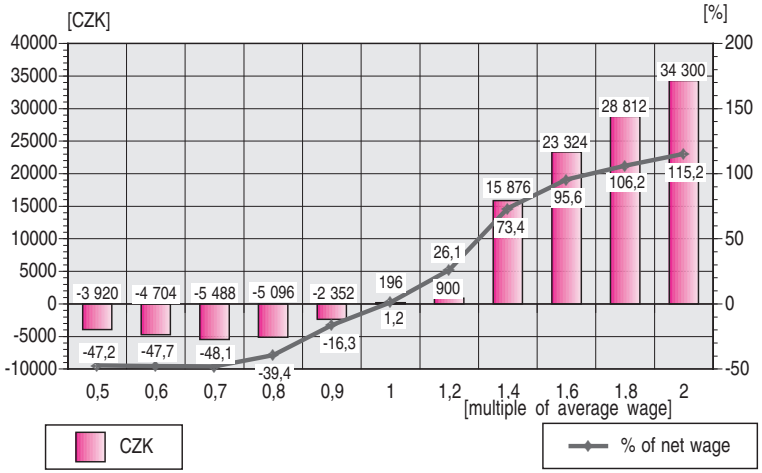
calculated according to the current and proposed legislation for 196 days of work incapacity.

Graph 28. Share of the proposed amount of maternity benefit and current PPM for 28 weeks of work incapacity in relation to net wage



Source: Ministry of Labour and Social Affairs.

Graph 29. Difference in the amount of maternity benefit and PPM for 28 weeks of work incapacity



Source: Ministry of Labour and Social Affairs.

Nursing benefit

With nursing benefit, there will also be the same changes in reduction as those applicable to sickness benefit and maternity benefit when appointing the daily assessment base. The percentage rate of the daily amount of the benefit, however, will be reduced from 69% to 50% of the reduced daily assessment base.

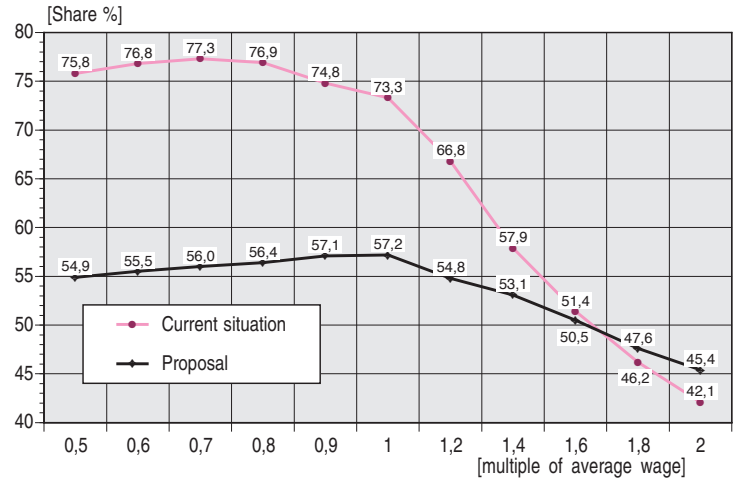
The proposed method for the calculation of nursing benefit will lead to a reduction in expenditure on this benefit in 2006 by 28%, i.e. by approximately CZK 284 million.

The proposed measure will entail a reduction in the ratio of the benefit to the previous wage (compensation ratio) for insured persons with an income of up to 1.7 times the average wage in the national economy. For example, when comparing the amount of the new nursing benefit with the nursing benefit calculated under current legislation, among insured persons with below-average incomes there will be a reduction in the compensation ratio by 16-21 percentage points, whereas among insured persons with an income equal to two times the average wage the compensation ratio will increase by three percentage points (see Graph 30).

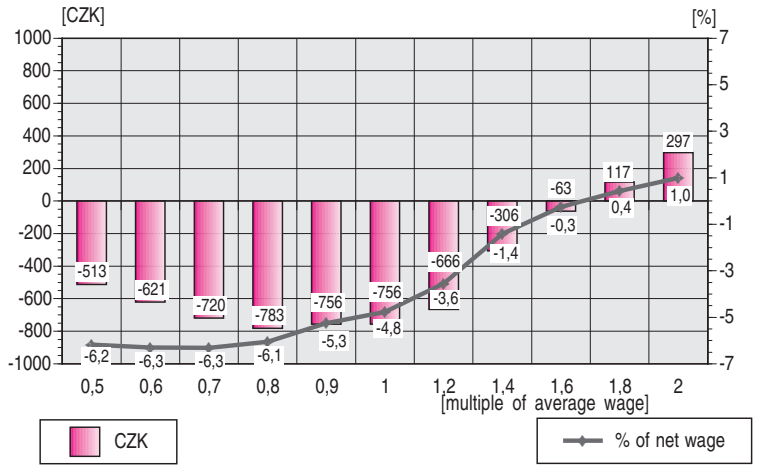
The influence of changes in the method used to calculate the benefit on the amount of the benefit compared with legislation in 2003 is documented in Graph 31, which shows the differences in the amount of the benefit for nine days of work incapacity.

The fall in income from nursing benefit, over nine days of work incapacity and in the case of an average income, amounts to CZK 783. For a case lasting 16 calendar days and calculated from a multiple of 0.8 of the average income in the national economy, the nursing benefit of a single mother will fall by CZK 1,462.

Graph 30. Share of the amount of nursing benefit and POČR over nine days of work capacity in relation to the net wage



Graph 31. Difference in the amount of nursing benefit and POČR over nine days of work incapacity



C.3.3. CONCLUSIONS

The economic consequences of all the proposed measures are summed up in the following table.

Table 65. Estimate of sickness insurance revenues and expenditure (CZK million)

		Current legislation				proposal		proposal	
		2004 budget	2005	2006	2007	2006	2007	2006	2007
						Sickness rate: 6.2		Sickness rate: 5.8	
Premium revenues		**35,000**	**37,670**	**40,160**	**42,600**	**24,640**	**26,140**	**24,640**	**26,140**
Sickness insurance expenditure		**31,047**	**31,755**	**35,481**	**37,886**	**24,251**	**25,807**	**23,055**	**24,534**
Of which sickness		25,942	26,721	29,927	31,934	18,587	19,780	17,391	18,507
maternity		4,150	4,097	4,546	4,877	4,940	5,256	4,940	5,256
nursing		950	931	1,002	1,069	718	765	718	765
compensation benefit		5	6	6	6	6	6	6	6
Difference R - E – sickness		**3,953**	**5,915**	**4,679**	**4,714**	**389**	**333**	**1,585**	**1,606**
Wage (employer's expenditure)						9,178	9,769	8,587	9,140
Total expenditure of sickness insurance + wage replacement						33,429	35,576	31,642	33,674
Average % PN		6,2	6,0	6,2	6,2	6,2	6,2	5,8	5,8
Structural parameters									
Reduction limit(RH)*	1	480	480	520	560	653	697	653	697
	2	690	690	750	800	980	1045	980	1,045
	3					1,959	2,089	1,959	2,089
DVZ credit	Up to 1.		100% (90%)			90%		90%	
	From 1. RH to 2. RH		60%			60%		60%	
	From 2. RH to 3. RH		0%			30%		30%	
	Above 3. RH		0%			0%		0%	
% rate from DVZ	Sickness days 1-3		25%			25%		25%	
	Sickness day 4+		69%			60%		60%	
	Maternity from day 1		69%			70%		70%	
	Nursing from day 1		69%			50%		50%	
Number of insured		4,234	4,238	4,239	4,242	4,239	4,242	4,239	4,242

* RH under current legislation will remain the same until 2005. From 2006, in accordance with Section 40 of the valid legislation, these limits will increase in line with the growth.
RH under the bill is a multiple of 1, 1.5 and 3 of the general assessment base.
Premium rate current situation 4.4% = 3.3% employer + 1.1% employee
proposal 2.7% = 1.6% employer + 1,1% employee

Revenues from premiums are influenced by the amount of the average percentage of work incapacity, i.e. by how many insured persons out of a hundred are on sick leave every day (see Chapter B.2.3.). If the average percentage of work incapacity is reduced by half a percentage point, revenues from premiums will increase by 0.5% of the original value.

Expenditure on sickness benefits is also influenced heavily by the sickness rate. A reduction or increase in the value of the average percentage of work incapacity by half a percentage point represents a reduction or increase in expenditure on sickness benefits by 8% of the original value of sickness benefit expenditure.

PART D

CONCLUSIONS STEMMING FROM AN EVALUATION OF THE CURRENT SITUATION AND FROM PROJECTION CONCLUSIONS

D.1. PENSION INSURANCE

It is evident that the current pension system requires further fundamental changes, because its settings do not comply with forecast economic and demographic developments. Changes could be 'system-based', i.e. they could reduce the weight of the pay-as-you-go system and reinforce the role of the supplementary private system, or there will have to be parametric changes in the current system, bringing it closer to an actuarial balance.

As has been mentioned in Part C of this report, the gradual rise in the retirement age to 67 will play a major role in eliminating the impact of ageing within the Czech population. It will lead to a significant reduction in the implicit debt and to a reduction in the required contribution rate. Therefore it is necessary to **continue the gradual raising of the retirement age to 67**. The method used to valorize pensions and the development of reduction limits for the calculation of pensions also have a considerable impact on the implicit debt and the required contribution rate. As ensues from Chapter C.2., the current pension system can be stabilized in the long term (with a certain risk). A comparison of the three reform scenarios under consideration reveals the most acceptable to be the one that will lead to a minimum implicit debt and contribution rate of 28%, i.e. the one which, besides the above-mentioned increase in the retirement age, also considers the **valorization of pensions corresponding to 50% of the increase in the consumer price index and 50% of the wage increase, does not reckon on an increase in the base assessment,** and valorizes both reduction limits by a little more than the wage rise (i.e. it increases equity, or merit, within the system). The **increase in the 'merit factor'** is a prerequisite for the repeat Fulfillment of ILO Convention No. 128, which the Czech Republic failed to respect in 2004. The high level of solidarity must be reduced in the field of determining the amount of premiums (even though we will 'pay' for this with a fall in revenues from premiums). Because no maximum assessment base exists for the setting of the amount of the premium for

employees, among employees paying high contributions into the system there is a significant disproportion between the contributions made and the benefits received, and the employer's costs for such employees are very high. Therefore it would be appropriate to **introduce a maximum assessment base**.

D.2. SICKNESS INSURANCE

Key factors affecting the balance of revenues and expenditures are developments in work incapacity and the amount of benefits. A suitable way of affecting these developments would be to motivate employers and insured persons to draw less on sickness insurance benefits. This can be achieved by **incorporating employers into the system** by making them pay a wage replacement over the working days at the beginning of sick leave and by **changing the structure of benefits**, e.g. as described in Chapter C.3.2. As in the case of pension insurance, with sickness insurance it would be expedient to **introduce a maximum assessment base** to set the premiums.

ANNEX

I. EXAMPLES OF BENEFIT CALCULATIONS

Legislation in force as at 1 January 2004

(A) Example of pension calculation
(B) Examples of sickness benefit calculations

(A) EXAMPLE OF PENSION CALCULATION

Situation

A man born on 1 February 1942 completed his compulsory primary education in 1956 and decided to study at secondary school; after completing his studies he was employed constantly up to 31 December 2003, and as of 1 January 2004 he is awarded an old-age pension in accordance with Section 29 of Act No. 155/1995 (i.e. a 'normal' old-age pension). In 1993, he was sick for 10 days, in 1994 he was sick for 20 days, and in 1996 he was sick for 15 days.

Calculation

1. **Determining the retirement age**

   The retirement age was reached on 1 April 2003 (he reached the age of 60 on 1 February 2002, i.e. in the seventh calendar year after 1995, so his retirement age is 60 years + 7 x 2 months).

2. **Insurance period (including period of study) gained until the emergence of the entitlement to the old-age pension**

   46 full years of insurance (1 September 1956 – 31 March 2003).

3. **Determining the decisive period**

   The decisive period for setting the personal assessment base in this case is eighteen years, determined by the years 1986 to 2003 (2003 is the final year prior to the granting of the pension).

4. Other requirements

- for the individual calendar years of the decisive period, determine the amount of the assessment bases and the number of days of ineligible periods ('VD') – in this case the days of sickness specified in the Situation,
- for the individual calendar years 't' of the decisive period (with the exception of the calendar year preceding the year of the award of the pension), determine, from government decrees, the amount of the general assessment bases ('VVZt') and the amount of the corresponding conversion coefficient ('PK'; in 2004 PK_{2002}=1.0717),,
- for the individual calendar years of the decisive period, set the coefficients of the growth of the general assessment base ('KNVVZ';

  $KNVVZ_t = \frac{VVZ_{2002} \times PK_{2002}}{VVZ_t}$),
- set the annual assessment bases for the individual calendar years of the decisive period ('RVZ'; $RVZ_t = VZ_t \times KNVVZ_t$).

The procedure is outlined in the following table:

Year	VZ_t [CZK]	VD [number of days]	VVZ_t [CZK]	$KNVVZ_t$	RVZ_t [CZK]
1986	40,000	0	2,964	5,6807	227,227
1987	40,000	0	3,026	5,5643	222,571
1988	41,000	0	3,095	5,4402	223,049
1989	42,000	0	3,170	5,3115	223,084
1990	44,000	0	3,286,	5,1240	225,457
1991	51,000	0	3,792	4,4403	226,454
1992	62,000	0	4,644	3,6256	224,790
1993	77,000	10	5,817	2,8945	222,879
1994	92,000	20	6,896	2,4416	224,630
1995	108,000	0	8,172	2,0604	222,522
1996	128,000	15	9,676	1,7401	222,737
1997	142,000	0	10,696	1,5742	223,535
1998	155,000	0	11,693	1,4400	223,195
1999	168,000	0	12,655	1,3305	223,525
2000	179,000	0	13,490	1,2481	223,418
2001	194,000	0	14,640	1,1501	223,120
2002	208,000	0	15,711	1,0717	222,914
2003	222,000	0	16,779	1,0000	222,000
total		**45**			**4,027,107**

General note: The general assessment base growth coefficient is set with an accuracy of four decimal places (the fourth decimal place is rounded up or down in accordance with general rules). The annual assessment base is rounded up to the next full crown.

5. Setting the personal assessment base ('OVZ')

OVZ = monthly average of RVZ total for the years 1986 to 2003 =

$$= \frac{\text{total } RZV_{1986 \text{ to } 2003}}{\text{number of days 1986 to 2003 - VD}} \times 30.4167 = \frac{4,027,107}{6,574 - 45} \times 30.4167 =$$

= 18 726 CZK

Because days when sickness benefit is paid ('ineligible days') feature among the days in the decisive period used to determine the income, when setting the personal assessment base the total number of days of the decisive period must be reduced by the number of such days (in the given example by 45 days).

General note: The personal assessment base is rounded up to the next full crown.

6. Setting the calculation base ('VZ')

Reduction: up to the first reduction limit, 100% of OVZ is calculated, from the first reduction limit to the second reduction limit, 30% of OVZ is calculated, and as of the second reduction limit 10% of OVZ is calculated.

First reduction limit = CZK 7,500, second reduction limit = CZK 19,200.

VZ = CZK 7,500 + 30% x (18,762 - 7,500 CZK) = **10,879 CZK**

7. Setting the percentage-based assessment („PV")

The amount of the PV is 1.5% of the VZ for each full year of the insurance period gained until the emergence of the entitlement to an old-age pension, i.e. 46 x 1.5% VZ = 69% VZ = 69% of 10,879 CZK = 7,507 CZK per month;

General note: The minimum percentage-based assessment is 770 CZK per month.

8. Setting the base assessment ('ZV')

ZV = **1,310 CZK per month** (last amended by Government Decree No. 104/1998)

9. Increase over the period of gainful activity carried out after the emergence of the entitlement to an old-age pension

From 1 April 2003 to 31 December 2003, i.e. for 275 (= 3 x 90 + 5) calendar days, the increase is 3 x 1.5% VZ = 3 x 1.5% x 10,879 = 490 CZK

PV = 7,507 + 490 = 7,997 CZK

10. The valorization increase under Government Decree No. 345/2001 does not apply.

11. Total amount of old-age pension

S = ZV + PV = 1,310 CZK + 7,997 CZK = **9,307 CZK per month**

General notes:

- The old-age pension is rounded up to the next full crown; the amount of the old-age pension calculated as at the date of the emergence of the entitlement to the pension is rounded up separately and any increase in the old-age pension over a period of employment after the emergence of the entitlement is rounded up separately.
- An increase of 1.5% applies to a period gained after 1 July 2001; an increase of 1% applies to the period before this date.

(B) EXAMPLES OF SICKNESS INSURANCE BENEFIT CALCULATIONS[47]

Four benefits are paid out of sickness insurance:

Sickness benefit, nursing allowance, maternity benefit, equalization contribution during pregnancy and maternity.

[47] General Note – Definition of Terms

- **Decisive period:** as a rule the 12 calendar months preceding the calendar month in which incapacity to work occurs (quarantine, the need to nurse a family member, or maternity leave).
- **Daily assessment base** (DVZ): the creditable income (all income subject to social security premium payments and the state employment policy contribution cleared to the employee in the decisive period) is divided by the number of calendar days in the decisive period (this number does not include certain days in order to prevent the unnecessary 'pulverization' of the daily assessment base, e.g. days when sickness benefit is provided are not included).
- **Reduction in the daily assessment base** (DVZr): two limits are set for the reduction. In the period from 2002-2004 the first reduction limit is CZK 480 and the second reduction limit is CZK 690. As of 1 January 2004, for sickness benefit and nursing benefit over the first 14 calendar days of work incapacity, 90% of the amount of CZK 480 applies, 60% of the amount between CZK 480 and CZK 690 applies, and any amount over CZK 690 is not taken into consideration. For maternity benefit as of day one and for sickness and nursing benefit as of the 15th calendar day of work incapacity, the amount up to CZK 480 is counted in full, 60% of the amount between CZK 480 and CZK 690 is counted, and any amount over CZK 690 is not taken into consideration.
- **Daily benefit set by a percentage rate:** the sickness benefit for the first three days of PN is 25% of the DVZr, on the fourth and subsequent days of PN it is 69% of the DVZr; maternity benefit is 69% of the DVZr; the nursing allowance is 69% of the DVZr.

1. SICKNESS BENEFIT

Situation

A worker becomes sick on 4 January 2004 and sick leave (PN) lasts until 30 January 2004 (i.e. 27 calendar days).

His creditable income in January - December 2003 was as follows:

A) 0.7 times the average wage in the national economy for 2003, i.e. 11,746 CZK per month.

B) 1.5 times the average wage in the national economy for 2003, i.e. 25,169 CZK per month.

Calculation

1. Decisive period		***January – December 2003***
		365 calendar days
2. Daily assessment base		
A) Creditable income	140,952 CZK	12 x 11,746
Daily assessment base	***386.17 CZK***	140,952 / 365
B) Creditable income	302,028 CZK	12 x 25,169
Daily assessment base	***827.47 CZK***	302,028 / 365
3. Reduction in daily assessment base[48]		
Days 1 – 14 of PN		
A)	***348 CZK***	386.17 x 90%
B)	***558 CZK***	480 x 90% + (690 - 480) x 60%
Day 15 and subsequent days of PN		
A)	***387 CZK***	386.17 x 100%
B)	***606 CZK***	480 x 100% + (690 - 480) x 60%
4. Daily sickness benefit[48]		
A) days 1-3 of PN	***87 CZK***	348 x 25%
days 4-14 of PN	***241 CZK***	348 x 69%
days 15+ of PN	***268 CZK***	387 x 69%
B) days 1-3 of PN	***140 CZK***	558 x 25%
days 4-14 of PN	***386 CZK***	558 x 69%
days 15+ of PN	***419 CZK***	606 x 69%

[48] The calculation is rounded up to the nearest full Czech crown.

5. Sickness benefit for the given period of sickness (27 calendar days)[49]

A) ***6,396 CZK*** 3 x 87 + 11 x 241 + 13 x 268

B) ***10,113 CZK*** 3 x 140 + 11 x 386 + 13 x 419

2. FAMILY MEMBER CARE BENEFIT

Situation

A worker cares for her sick child, and the nursing allowance lasts from 4 January until 12 January 2004 (9 days, i.e. the maximum period per case for a non-single parent). Her creditable income in January - December 2003 was 16,779 CZK per month (the amount of the average wage in the national economy for 2003).

Calculation

1. Decisive period **January – December 2003**
365 calendar days

2. Daily assessment base

A) Creditable income 201,348 CZK 12 x 16,799

Daily assessment base ***551,64 CZK*** 201,348 / 365

3. Reduction in the daily assessment base[49]

475 CZK 480 x 90 % + (551,64 - 480) x 60 %

4. Daily benefit[49]

Per day of allowance ***328 CZK*** 475 x 69 %

5. Family member care benefit for the given period (9 calendar days)[49]

2,952 CZK. 9 x 328

[49] The calculation is rounded up to the nearest full Czech crown.

3. MATERNITY BENEFIT (PPM)

Situation

A woman goes on maternity leave, which lasts from 4 January 2004 until 18 July 2004 (196 calendar days). She can claim PPM for 28 weeks. Her creditable income in January - December 2003 was 16,779 CZK per month (the amount of the average wage in the national economy for 2003).

Calculation

1. Decisive period ***January – December 2003***
365 calendar days

2. Daily assessment base

Creditable income 201,348 CZK 12 x 16,779

Daily assessment base ***551,64 CZK*** 201,348 / 365

3. Reduction in the daily assessment base[49]

523 CZK 480 x 100% + (551.64 - 480) x 60%

4. Daily benefit PPM[49]

Per day of PPM ***361 CZK*** 523 x 69%

5. Maternity benefit for the given period
(196 calendar days)

70,756 CZK 361 x 196

4. PREGNANCY AND MATERNITY COMPENSATION BENEFIT

Situation

A worker is assigned to do different work on 1 February 2004 because she is pregnant. She starts maternity leave on 1 May 2004. Before the transfer, her creditable income in February 2003 to January 2004 was 16,779 CZK per month and after the transfer her creditable monthly income was 11,746 CZK (0.7 times the amount of the average wage in the national economy for 2003).

Calculation

1. **Decisive period** — ***February 2003 – January 2004***
   365 calendar days

2. **Daily assessment base before transfer**

Creditable income	201,348 CZK	12 x 16 779
Daily assessment base	***551.64 CZK***	201,348 / 365

3. **Reduction in the daily assessment base**[49]
   523 Kč — 480 x 100% + (551.64 - 480) x 60%

4. **Average daily amount per calendar day after transfer**
   i.e. the average creditable income per calendar day in the individual calendar months following the transfer

February	**405.03 CZK**	11,746 / 29
March	**378.90 CZK**	11,746 / 31
April	**391.53 CZK**	11,746 / 30

5. **Daily pregnancy and maternity compensation benefit**[49]
   i.e. the difference between the daily assessment base determined as at the date of transfer and the average creditable income per calendar day after the transfer

February	**118 CZK**	523 - 405.03
March	**145 CZK**	523 - 378.90
April	**132 CZK**	523 - 391.53

6. **Pregnancy and maternity compensation benefit** for the period between the transfer and the start of maternity leave
   11 367 CZK. — 118 x 29 + 145 x 31 x 132 x 30

Note: The pregnancy and maternity compensation benefit is provided for a maximum period until the woman begins maternity leave and, when maternity leave ends, for a maximum period until the end of the ninth month after the birth.

II. OVERVIEW OF PRINCIPAL MEASURES ADOPTED SINCE 1990

A/ PENSION SYSTEM

- **1990 to 1992**
  - ✔ The discrimination of self-employed persons was eliminated (in particular, the security of self-employed persons was based on the level of other persons in gainful employment) and preferences in the pension system were cancelled (work categories and personal pensions were discontinued). These measures led to a situation where practically all economically active persons obtain pension entitlements based on uniform conditions and suitable conditions were created for further reform steps.
  - ✔ The implementation of pension insurance and sickness insurance was unified (sickness insurance was transferred from the competence of the trade unions, the Czech Union of Production Cooperatives, and district national committees and, in terms of organization, was unified with pension insurance in the scope of a single state authority – the Czech Social Security Authority, managed by the Ministry of Labour and Social Affairs).
  - ✔ Regular valorization of pensions was introduced – the first systematic valorization measure was adopted, setting the conditions and the method to be used for regular increases in pensions.

- **1994**
  - ✔ The adoption of the State-Subsidized Pension Plan Act. The Czech pension system therefore now had two pillars – a basic compulsory, defined benefit and PAYGO pillar, and a supplementary voluntary, defined contribution and capital financed pillar of state-subsidized pension plans; the supplementary voluntary pillar includes private life assurance.

- **1995**
  - ✔ Adoption of the Pension Insurance Act. This new legislation included fundamental measures such as gradual increases in the age limit for an entitlement to old-age pensions, system unification, a change in the structure used to calculate pensions, responding in part to developments in external factors; full (and partial) disability was redefined with a link to a percentage-based reduction in the ability to carry out systematic gainful activity as a result of long-term poor health, which does not permit the previous 'professional' and 'estate' disability, in addition to the opportunity of retiring

early with a temporarily reduced old-age pension (until two years before the pensioner reaches the statutory retirement age), which was lifted from current legislation; it was made possible to allow people to retire early with a permanently reduced old-age pension – up to three years before they reached the retirement age. The Pension insurance Act was a significant shift towards the practices common in EU Member States (e.g. the entitlement to pensions was not conditioned by residence in the Czech Republic) and complies with Community law.

- **1996**
  - ✔ A special account was set up for pension insurance as part of state financial assets, making it possible (albeit in the framework of the national budget) to define the balance of the basic pension insurance. The resources in this account can be used only to increase benefits or to cover a deficit in pension insurance premiums.
- **1997**
  - ✔ In the scope of cost-cutting measures, there was a restriction in the crediting of most types of replacement insurance periods and the conditions for pension valorization were made more stringent.
- **1999**
  - ✔ An amendment to the State-Subsidized Pension Plans Act was passed, which increased the level of safety of the deposits of participants and expanded the possibilities of this supplementary insurance (an increase in the state contribution, the introduction of tax allowances for participants – employees and for contributing employers, more stringent conditions were set for pension plans).
- **2001**
  - ✔ When setting the amount of deposits, actuarial rules were taken into account more (an increase in the reduction of the percentage-based assessment for early retirement and more advantages for deferred retirement).
- **2002**
  - ✔ Regular increases in pensions were introduced as of January every year (for the first time in January 2003) and the rules for increasing pensions were made more precise so that decisions can be made on increases based on final statistics and not based on estimates of these indicators, with the possibility, in exceptional cases, of raising pensions outside the regular date if there is a considerable rise in prices.

- **2003**
  - ✔ Effective as of 1 January 2004
    - Increases in the age limit for an entitlement to an old-age pension even after 2007, until a uniform age limit of 63 years is reached for men and childless women; for other women, the age limit will remain differentiated based on the number of children they have reared (59 to 62 years),
    - A restriction in the possibility of retiring before the statutory retirement age by discontinuing one of the two types of early retirement – i.e. retirement with a temporarily reduced old-age pension,
    - A reduction in the assessment of study periods for the purposes of pension insurance,
    - The cancellation of the condition making it possible to have a claim to the payment of an old-age pension in addition to income from gainful activity in a period of two years after the establishment of the claim to the pension, provided that the set income limit is not exceeded, and the establishment of the condition to negotiate employment for a maximum of one year (so far no time limit has been set),
    - The classification of self-employment into primary and secondary employment for the purposes of pension insurance.
  - ✔ An amendment to the State-Subsidized Pension Plans Act was approved, the main purpose of which was to achieve harmonization with EU law.

B/ SICKNESS INSURANCE

- **1993**
  - ✔ The transfer of spa care to the health insurance system.
- **1993, 1994**
  - ✔ Sickness benefit started being provided for calendar days, calculated from the gross wage over the calendar quarter preceding the insured event.
  - ✔ The income decisive for entry to sickness insurance was increased from CZK 120 to CZK 400 per calendar month.
- **1995, 1996**
  - ✔ The transfer of child allowance, birth allowance, and funeral allowance to the system of state social support; besides sickness benefit, the sickness insurance system continued to provide another three benefits: nursing benefit for those looking after a member of the family, maternity benefit, and pregnancy and maternity compensation benefit.

✔ A change in sickness insurance for self-employed persons – the compulsory insurance becomes voluntary.

- **1999**
  - ✔ A system of reduction limits was introduced to appoint the amount of sickness benefit; these were regularly valorized (as at 1 January every year).
- **2002**
  - ✔ A decision was made (in connection with handling the financial impacts of the floods in 2002) that the reduction limits for setting earnings decisive for the calculation of sickness insurance benefits would not be increased for 2003.
- **2003**
  - ✔ Effective as of 1 January 2004:
    - The decisive period used to determine the daily assessment base for the setting of sickness insurance benefits was extended from the calendar quarter to 12 calendar months,
    - The daily assessment base for the calculation of sickness benefit and nursing benefit for those taking care of a family member for the first 14 calendar days of work incapacity (quarantine) or the need for treatment was reduced from the current 100% to 90% of the amount up to CZK 480 (the first reduction limit),
    - Sickness benefit for the first three calendar days of sick leave was reduced from 50% to 25%,
    - The period over which the reduction limit of the daily assessment base will not be increased is extended to include 2004 and 2005; this measure will also apply in the sickness welfare system within the armed forces.

C/ PREMIUMS

- **1993**
  - ✔ In connection with tax reform, social security premiums are introduced (pension insurance and sickness insurance) along with the state employment policy contribution as a special payment outside the fiscal system – this is income of the national budget – a total rate of 36% of the assessment base (sickness insurance 4.8%, pension insurance 27.2%, state employment policy 4%).

  - ✔ With effect as of 1 January 1994, the overall rate of social security premiums and the state employment policy contribution was reduced from 36% to 35% of the assessment base (sickness insurance 4.8%, pension insurance 27.2%, state employment policy 3%).
- **1995**
  - ✔ With effect as of 1 January 1996, the overall rate of social security premiums and the state employment policy contribution was reduced from 35% to 34% of the assessment base (sickness insurance 4.4%, pension insurance 26%, state employment policy 3.6%).
- **2003**
  - ✔ Effective as of 1 January 2004:
    - An increase in the premium rate applicable to pension insurance by two percentage points (from 26% to 28% of the assessment base) and a reduction in the premium rate for the state employment policy by two percentage points (from 3.6% to 1.6% of the assessment base),
    - A gradual increase in the minimum assessment base used to set premiums for the self-employed in 2004 to 2006 from 35% to 50% of the difference between revenues and expenses (40% in 2004, 45% in 2005),
    - The classification of the self-employed into persons self-employed as their primary and secondary gainful activity; persons self-employed as their primary gainful activity are always participants in pension insurance and therefore must pay deposits on premiums regardless of their income, and they have a higher minimum assessment base than persons who are self-employed as their secondary gainful activity.

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