# Financial development and outlook of the public long-term care insurance scheme

The introduction of the public long-term care insurance scheme in 1995 added a new branch to the social security system. Cover against the risk of needing long-term nursing care was to be organised by the state and the financial burden on the agencies responsible for providing social assistance simultaneously eased. Given a pay-as-you-go financing system, this implies – particularly in view of the ageing of society – shifting the financial burden into the future.

The new insurance scheme initially generated financial surpluses, which were then used to finance deficits run up in subsequent years. The ageing of society, which is one of the greatest challenges to the sustainability of public finances, is also impinging noticeably on the financial development of the public long-term care insurance scheme. The reserves are likely to be exhausted in the near future and contribution rates threaten to rise.

A reform of the long-term care insurance scheme is currently under discussion. Given the challenging *status quo* and the fact that the existing problems are likely to become more acute over time, it is important to consider what long-term effects on the future burden of social security contributions would ensue if the benefit range were to be expanded and benefit rates dynamised.

## The introduction of a statutory long-term care insurance scheme

*Before 1995, the risk of requiring long-term care was covered privately or through social assistance*

Before obligatory long-term care insurance was introduced, the financial burdens associated with long-term nursing care were a private risk which was initially managed using an individual's own or his or her family's funds. If this income or wealth was not sufficient to cover the costs entailed in long-term care, they were taken on by the public agencies responsible for providing social assistance. From 1991 to 1994, gross social assistance expenditure on long-term care rose from €6½ billion to just over €9 billion. This was financed by central, state and local government, ie largely through taxes.

*Long-term care insurance eases the financial burden on persons requiring care and public agencies responsible for providing social assistance*

In 1995, a public long-term care insurance scheme was introduced as a separate branch of the social security system in Germany. The aims were to provide insurance against the financial burdens associated with long-term care and to ease the burden on the public agencies responsible for providing social assistance.[1] In order to achieve these aims as quickly as possible, long-term care insurance was introduced on a pay-as-you-go basis for all those with public health insurance. At the same time, those with private health insurance were obliged to take out private long-term care insurance, which, particularly in the initial stages, was modelled to a large extent on the statutory social security schemes (see box on page 31 for details of the institutional provisions).

Immediately after the scheme was introduced, insurance protection was provided for all insurees regardless of their individual nursing care risk. This gave older insurees an "introduction gain", as the standardised social security contribution rate did not cover the costs which they were likely to incur. This privilege was granted at the expense of younger insurees. Owing to the ageing of society, the pay-as-you-go method of funding the long-term care insurance scheme will place additional burdens on future generations, too, because alternative, funded insurance would be less affected by the resulting deterioration in the implicit rate of return and would therefore lead to a lower overall contribution rate. In addition, the lack of

*Pay-as-you-go financing entails shifting burdens into the future*

### Overview of long-term care insurance benefits

| | Nursing benefit | Non-financial benefits | |
|---|---|---|---|
| | Care provided by relatives, neighbours, acquaintances | Outpatient care provided by a professional service | In-patient care [1] |
| Care level | up to € ... per month | | |
| Level I: Substantial care needs, at least 1.5 hours per day spent on care | 205 | 384 | 1,023 |
| Level II: Intensive care needs, at least 3 hours per day spent on care | 410 | 921 | 1,279 |
| Level III: Highly intensive care needs, at least 5 hours per day spent on care | 665 | 1,432 (up to 1,918 in cases of particular hardship) | 1,432 (up to 1,688 in cases of particular hardship) |

**1** Board and lodging ("hotel costs") are paid for by the person requiring care.

Deutsche Bundesbank

**1** A compulsory long-term care insurance scheme can also be justified as a safeguard against free riding. The obligatory nature of the insurance scheme prevents individuals from opting not to make their self-provision because a safety net is provided by the state.

## Overview of the provisions of the long-term care insurance scheme

Compulsory contributions to the long-term care insurance scheme were introduced on 1 January 1995 and initially the contribution rate was 1% of income subject to insurance deductions.[1] Benefits were not paid out until 1 April 1995. The surplus attained by delaying the introduction of benefits was used to accumulate reserves. From 1 July 1996 the range of benefits was extended to include in-patient long-term care. At the same time the contribution rate was increased to 1.7%.[2] Since 1 January 2005 childless persons have had to pay an additional contribution of 0.25% of their income. Insured persons born before 1 January 1940 and persons below the age of 23 are exempt from this. There is no direct link between the level of (income-related) contributions and the (standardised) benefits of the public long-term care insurance scheme.

The reserves, which at the end of 2006 totalled just over €3½ billion, must amount to at least half the average expenditure for one month, which at the moment is approximately €¾ billion. Due to the uniform contribution rate set by law and the completely standardised benefits, there is virtually no competition among the long-term care insurance institutions. The shortfalls of individual insurance institutions are largely made good by compensatory transfers from other institutions. Only administrative costs are reimbursed at a flat rate, so that there is no incentive in this case to act inefficiently at the expense of the other long-term care insurance institutions. While persons with statutory health insurance are automatically members of the public long-term care insurance scheme, which is incorporated in the organisational structure of the statutory health insurance scheme, private long-term care insurance schemes were introduced for persons with private health insurance. The statutory long-term care insurance system thus comprises both the public and private long-term care insurance schemes.

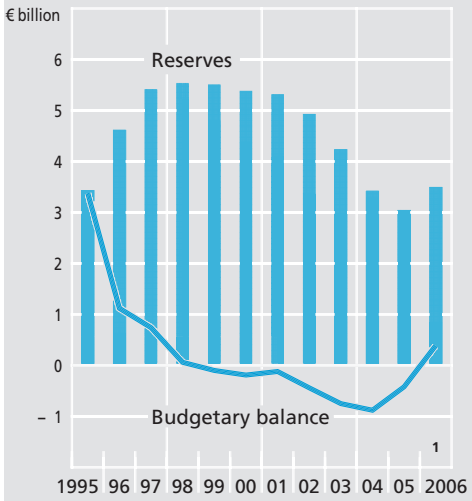
Private long-term care insurance schemes were at first required, from 1995, to accept persons with private health insurance under terms and conditions similar to those of the public insurance scheme. Thus under private schemes children are also co-insured, without having to pay contributions, up until the age of 18. A spouse who is not in employment pays only half the contribution and, furthermore, the contribution is limited to the maximum contribution rate to the public long-term care insurance scheme. Contributions were not allowed to be differentiated depending on the insuree's state of health and associated long-term care risk. Even for those taking up private long-term care insurance later, some of the provisions that are unusual for the private insurance industry, such as the free co-insurance of children, the prohibition of gender-specific tariffs and capping the insurance premium at the maximum contribution rate for public long-term care insurance, still apply. This regulation served to guarantee that from the start older people could also claim full long-term care benefits with limited contributions. The incomplete risk equivalence requires a risk structure equalisation scheme among private long-term care insurers.

The benefits for both public and private long-term care insurance are partly determined by the degree of nursing care needed, with three defined care levels. Furthermore, the benefit rates differ for out-patient and in-patient care. For out-patient care a further distinction is made as to whether the care is carried out by a professional service provider or by other carers (usually relatives). The rates range from €205 per month for out-patient care in nursing care level I to €1,432 in level III, provided the care is carried out by an out-patient service or in a hospital. In particular cases of hardship these benefit rates can be increased to €1,918 for out-patient care and €1,688 for in-patient care. Above and beyond that, once a year the long-term care insurance institutions assume the costs of a substitute nurse for a maximum of four weeks and up to €1,432. Moreover, the public long-term care insurance scheme bears the costs of procuring nursing care products. Finally, for "self-acquired nursing aids" contributions to the statutory pension insurance scheme are paid.[3] In addition, carers have statutory accident insurance.

**1** The income ceiling for contributions to the public long-term care insurance scheme is the same as that for the statutory health insurance scheme. In 1995 it was (in euro terms) €2,991 per month in western Germany and €2,454 in eastern Germany. Today the income ceiling for contributions – following harmonisation in 2001 – is €3,562.50 throughout Germany. — **2** The contributions are, as a general rule, apportioned equally between employers and employees. To compensate employers for the first stage (1%) the Day of Prayer and Repentance was abolished as a statutory public holiday. The only exception is Saxony, where employees consequently have to pay all of the 1% contribution themselves. The increase of 0.7 percentage point was then generally split equally between employers and employees. Hence employees in Saxony pay 1.35% and employers pay merely 0.35% into the public long-term care insurance scheme (see section 58 of the Eleventh Book of the Social Security Code). — **3** The level of pension contributions depends on the care level and the amount of time spent each week on care. In level III, with at least 28 hours a week spent on nursing care, contributions of 80% of the average nursing fee are paid (based on 2006: around €390 per month in western Germany and around €325 in eastern Germany). This creates a pension entitlement of 80% of an average wage earner's pension. At the present time this gives a monthly pension of around €21 in western Germany and €18.50 in eastern Germany – in each case for a year of nursing care.

Deutsche Bundesbank

Budgetary balances and reserves in the public long-term care insurance scheme*




Source: Federal Ministry of Health. — * Actual cash inflow. — 1 Provisional results, not adjusted for one-off additional contribution receipts.

Deutsche Bundesbank

means-testing moderates the consumption of wealth in old age.[2] The introduction of the public long-term care insurance scheme created a further branch of social security which pushes up labour costs without providing for equivalence between contributions and benefits. The impact of the public long-term care insurance scheme on income distribution thus goes beyond that of a purely insurance risk-related redistribution effect. Although the previous social assistance model also had a levelling effect, the social equalisation component was located within the tax and transfer system, which can be far more precisely targeted.

## Financial development since 1995

*Initial accumulation of reserves followed by years with deficits*

In 1995, in particular, and in the first few years that followed, the public long-term care insurance scheme recorded large surpluses, with the result that reserves rose to €5½ billion by 1998. From 1999 onwards, however, deficits were recorded, reaching an initial peak of almost €1 billion in 2004. The revenue side was boosted in 2005 through the introduction of a special contribution for childless persons and contributions for recipients of unemployment benefit II. In the past year, there was a surplus in terms of cash inflow of almost €½ billion, which was, however, entirely attributable to a one-off windfall gain generated from receiving social security contributions for almost 13 months (see box on page 33). The liquid reserves therefore grew again to €3½ billion. The statutory minimum reserve level is set at half a month's expenditure and is currently around €¾ billion.

*Weak revenue trend*

Between 1997 (when there was a contribution rate of 1.7% for the whole year for the first time) and 2006, revenue fell from 0.83% to 0.76% of gross domestic product (GDP). While nominal GDP increased by an annual average of just over 2% from 1997, gross wages and salaries rose by just under 1½% and the revenue of the long-term care insurance scheme from compulsory contributions (contribution base) grew by only ¾% per year (see chart on page 42). Alongside the

2 To the extent that this results in larger inheritances, the latter would tend to partly offset the intergenerational burden shift, albeit with varying interpersonal redistribution patterns.

## Recording the one-off increase in contribution receipts in 2006

In 2006, the public long-term care insurance scheme – like the other social security schemes – received, in terms of cash inflow, a one-off increase equivalent to the amount of almost one month's receipts owing to the advancement of the deadline for transferring social security contributions. In the case of the long-term care insurance scheme, this effect equated to almost €1 billion. According to the provisional financial outturn (PV 45 statistic), which is based on cash flows, the public long-term care insurance scheme posted a surplus of just under €½ billion in 2006.

Accounted for on an accruals basis, however, this one-off effect does not result in an improved result because, in this case, the (retrospectively paid) contributions are attributed to the month in which the labour income actually accrued. So advancing the transfer deadline has merely brought the payable amount and the actual payment into line with each other. The contributions for December 2006 were already received and reflected in the cash flow figures in December 2006, whereas under the old system the funds would mostly have flowed in January 2007. In the final annual outturn for 2006 (PJ 1 statistic), which is expected to be released in mid-2007, the results are calculated on an accruals basis. Therefore the one-off increase in receipts from contributions in terms of cash inflow will not be reflected in an improved result. Consequently, instead of a surplus it will probably show a deficit in roughly the same amount. In fact, the deficit is likely to have increased in 2006 – if the one-off effect is disregarded – against 2005.

In the national accounts – which, in particular, are relevant for reporting compliance with the Maastricht criteria – the figures are likewise recorded on an accruals basis. Hence in this case, too, the higher cash receipts do not result in an improved outturn.

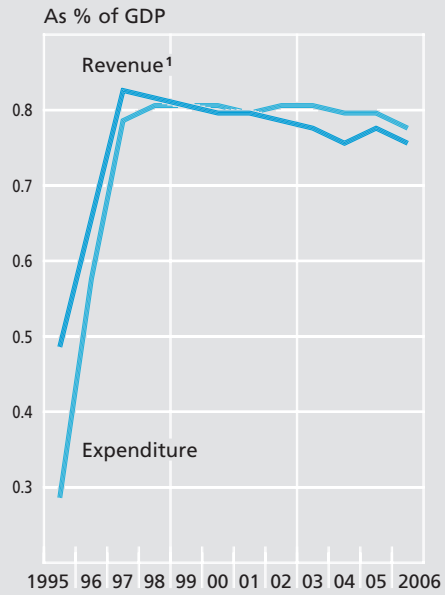
The solvency of the long-term care insurance scheme is dependent on its state of liquidity. Therefore, the time span for achieving compliance with the minimum level of reserves has been slightly extended by the advanced deadline for transferring social security contributions as the liquidity situation as at 31 December is now improved.

Generally, the task of analysing the financial development of the social security system is made more difficult by the fact that the different schemes follow different accounting approaches. For example, the statutory pension insurance scheme and the Federal Employment Agency only release cash balances. The high surpluses achieved in these cases, €7½ billion and €11 billion respectively, thus also appear in the final annual outturn. If the revenue from contributions were recorded using the accruals method, the statutory pension insurance scheme would not record a surplus but a deficit. In the case of the statutory health insurance scheme, by contrast, even the quarterly figures (KV 45 statistic) are accounted for using the accruals method, with the result that no one-off increases in revenue were registered.

The release of the final annual outturn of the public long-term care insurance scheme in mid-2007 in accordance with the accruals accounting principle will provide an opportunity to more accurately assess the extent of the effect of advancing the transfer deadline as then, for the first time, data computed according to both accounting practices will be available for one social security scheme. Translation of these results to the other social security schemes is, however, difficult due to their different contributor bases.

Deutsche Bundesbank

Revenue and expenditure of the public long-term care insurance scheme




**1** Adjusted for one-off additional contribution receipts in 2006.

Deutsche Bundesbank

generally moderate growth of wages and salaries over the past few years, the decoupling of the contribution base from gross wages and salaries also observed in other branches of the social security system has contributed additionally to the declining revenue ratio. This drift was driven by higher-earners, in particular, switching from public to private long-term care insurance and by the option introduced in 2002 for employees to make payments to supplementary pension schemes via their company which are not subject to social security contributions.[3] This is offset to a lesser extent by the fact that, since the beginning of 2004, the full contribution rate has been levied on company pensions (rather than half, as was previously the case) and that all capital payments have become subject to compulsory contributions.

*Expenditure ratio almost constant and determined by trend in long-term care need*

By contrast, at 0.8%, the ratio of expenditure to GDP has remained almost constant since 1997. However, relative to contributors' remuneration subject to insurance contributions, it has risen from 1.6% to 1.8%. The expenditure trend has been dampened as a result of the fixed nominal benefit rates, which have not been adjusted since the long-term care insurance scheme was introduced. The real value of benefits has therefore decreased over time. The nominal increase in expenditure to date is thus entirely attributable to a quantitative increase in long-term nursing care provision and a structural shift towards higher nursing charges. The growth in expenditure between 1997 and 2005 of just over 18% is therefore due to the 17½% increase in the number of persons being given long-term care (from 1.66 million to 1.95 million). In addition, there has been a gradual shift away from financial benefits (which were relatively cost-effective from the perspective of the long-term care insurance scheme) towards non-financial benefits for professional nursing services or in-patient nursing care.[4] The ratio of non-financial benefits to total expenditure on benefits has increased since 1997 from 61½% to 71½%. The share of out-patient long-term care has

**3** Under current law, the option to contribute to company pension schemes with direct payments which are not subject to social security contributions is restricted to the end of 2008.
**4** The differing benefit rates for out-patient care, which vary according to whether a commercial care provider (non-financial benefits) or other persons do the nursing (financial benefits), give the initial impression that care carried out by family members, for example, is fiscally advantageous. However, if it is taken into account that family members cut down the amount of paid work subject to compulsory tax contributions in order to provide nursing care, the overall fiscal costs of professional nurses and other carers are not that different.

fallen from 72% to 67%; this was mirrored by an increase in the proportion of in-patient nursing care to 33%. While this contributed to the increase in costs, it was partly offset by a shift in the relative number of persons being nursed at the different care levels which affected all types of care, from the highest care level (level III) (from 15½% to 13% of all cases) to care level I (from 46½% to 52%).

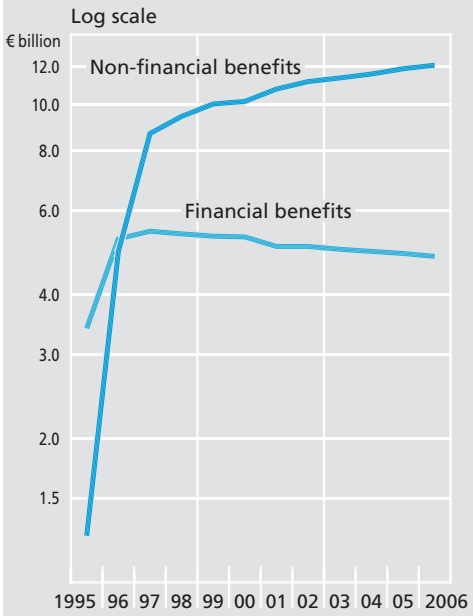
*Expenditure concentrated on older age groups*

Expenditure on long-term care insurance is even more clearly concentrated on the older age group than is the case for health insurance. More than half of all long-term care cases involve persons aged 80 or over. At around 55%, the percentage of expenditure on benefits which this group accounts for is somewhat higher still because the probability of a person requiring in-patient nursing care, which is a relatively expensive form of care, increases with age. In contrast, the risk of persons under 60 requiring long-term care is fairly small. This makes it clear that, similarly to the statutory pension insurance scheme and – to a lesser extent – the statutory health insurance scheme, the public long-term care insurance scheme is financially dependent on persons of working age, whereas benefits are primarily claimed by those in older age groups.

*Burden on public agencies responsible for providing social assistance eased*

The long-term care insurance scheme also had the objective of easing the burden on social assistance. In addition to generating savings for the statutory health insurance scheme, the draft legislation introducing the scheme also notably envisaged easing the financial burden on state and local government. The insurance benefits, which now largely superseded the previous nursing assistance, were projected to yield savings in out-patient care of just over €½ billion in the year of introduction (from April 1995 onwards) while the annual savings on in-patient care, which would only make themselves felt as of mid-1996, were estimated at €3½-4 billion per year. Around half of all savings by state and local government were to be channelled into financing investment in the long-term care infrastructure.[5] In reality, the (net) expenditure of state and local government on nursing assistance decreased from €6½ billion to €2½ billion between 1994 and 1997 and

Expenditure structure of the public long-term care insurance scheme



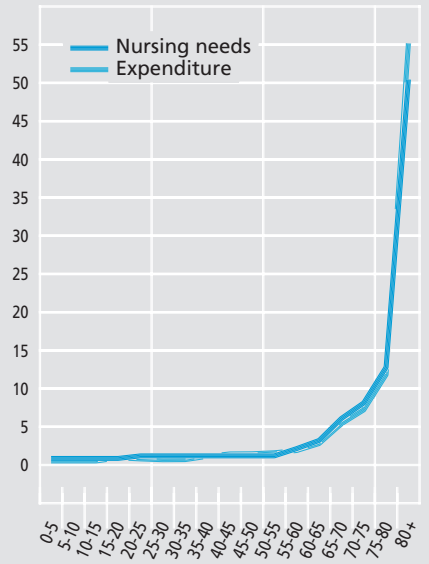

Source: Federal Ministry of Health.

Deutsche Bundesbank

5 Furthermore, it was thought that the introduction of the long-term care insurance scheme would lead to certain savings in war victims' pensions and war victims' welfare benefits.

Nursing needs and expenditure of the public long-term care insurance scheme by age group

2005, percentage shares




Deutsche Bundesbank

remained around this level, while other expenditure on assistance granted in particular circumstances continued to increase. By contrast, the volume of expenditure of the public long-term care insurance scheme reached just over €15 billion in 1997. Therefore, the bulk of the expenditure was spent on persons not considered to be in need according to the social assistance definition.

## Outlook for future financial development

*Improvement in cash balance merely transient*

Following the merely transient improvement in the cash balance in 2006, the reserves are likely to be depleted again as early as this year owing to deficits. Given a favourable macroeconomic trend, the minimum reserve requirement could be complied with until 2010 without any further adjustment measures. Subsequently, however, prompt action is likely to be required.

*Long-term problems on both the revenue and expenditure side*

In the long term, the public long-term care insurance scheme will face problems on both the expenditure and revenue side owing to the ageing of society. For one thing, the share of older persons in the total population will rise significantly. According to the Federal Statistical Office's forecasts, the proportion of persons over 80 will increase from 4½% today to 8% in 2030, reaching as much as 13½% by 2050.[6] The ratio of persons requiring long-term care to contribution payers is therefore also bound to increase. Conversely, after a last slight increase, the share of persons of working age (ie the vast majority of contribution payers) in the total population will decrease from 61½% in 2012 to 55½% in 2035 and will then remain at this low level.[7]

*Cost pressures on long-term care benefits fairly weak*

Cost pressures on long-term care benefits should be less intense than those on health insurance, for example, as there will not be such significant technical progress in the form of new products (methods of treatment, pharmaceuticals and technical aids) to push up costs. It still seems entirely plausible that the primary effect of increased life expect-

6 See Federal Statistical Office, Bevölkerung Deutschlands bis 2050, 11th coordinated population forecast, variant 1W2 (long-term positive immigration balance of 200,000 persons per year, constant birth rate of 1.4 children per woman and basic scenario for development of life expectancy, ie increase of remaining life expectancy for men aged 60 from 20.3 to 25.3 years and for women of the same age from 24.3 to 29.1 years by 2050).
7 The fact that the statutory retirement age will gradually be increased to 67 has been taken into account. Here, the working age is currently 20 to 65 and 20 to 67 as of 2029.

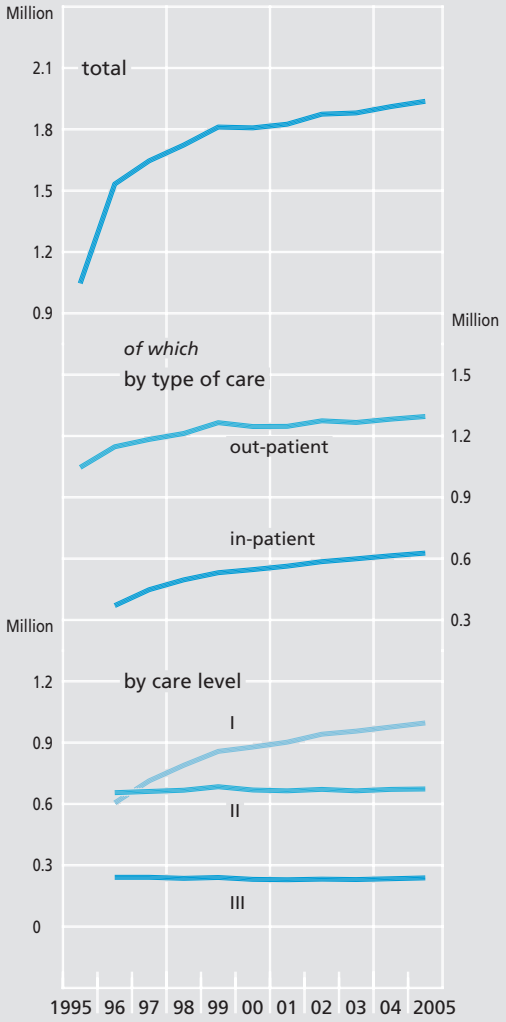
## Financial development of the public long-term care insurance scheme

| Item | 1995 [1] | 1997 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 p |
|---|---|---|---|---|---|---|---|---|---|
| Revenue | € billion [1] | | | | | | | | |
| Total contributions | 8.88 | 15.72 | 16.28 | 16.58 | 16.71 | 16.66 | 16.65 | 17.38 | 18.36 |
| Contributions for employees | 6.55 | 11.36 | 12.11 | 12.32 | 12.01 | 11.78 | 11.71 | 12.17 | 13.13 |
| Contributions for unemployed benefit recipients | 0.55 | 1.07 | 0.73 | 0.74 | 0.81 | 0.86 | 0.85 | 1.08 | 1.05 |
| Contributions from pensions | 1.45 | 2.69 | 2.84 | 2.89 | 3.18 | 3.30 | 3.35 | 3.37 | 3.39 |
| Other contribution receipts | 0.34 | 0.60 | 0.60 | 0.63 | 0.71 | 0.72 | 0.73 | 0.77 | 0.78 |
| Other revenue | 0.12 | 0.18 | 0.24 | 0.26 | 0.20 | 0.18 | 0.16 | 0.14 | 0.13 |
| Total | 9.00 | 15.90 | 16.52 | 16.84 | 16.92 | 16.84 | 16.82 | 17.53 | 18.49 |
| Expenditure | | | | | | | | | |
| Non-financial benefits | 1.27 | 8.82 | 10.62 | 10.93 | 11.33 | 11.53 | 11.75 | 12.05 | 12.26 |
| Non-financial benefits for out-patient care | 0.83 | 1.81 | 2.25 | 2.30 | 2.36 | 2.36 | 2.36 | 2.41 | 2.42 |
| In-patient care | | 6.35 | 7.47 | 7.74 | 8.01 | 8.18 | 8.34 | 8.51 | 8.67 |
| Other non-financial benefits | 0.43 | 0.66 | 0.90 | 0.89 | 0.96 | 0.99 | 1.04 | 1.13 | 1.17 |
| Financial benefits | 3.45 | 5.51 | 5.28 | 5.12 | 5.12 | 5.05 | 5.00 | 4.95 | 4.88 |
| Nursing benefit | 3.07 | 4.33 | 4.20 | 4.13 | 4.15 | 4.09 | 4.05 | 4.05 | 4.02 |
| Contributions to statutory pension insurance scheme | 0.38 | 1.17 | 1.07 | 0.98 | 0.96 | 0.95 | 0.94 | 0.89 | 0.86 |
| Other financial benefits | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Administrative expenditure | 0.56 | 0.79 | 0.80 | 0.82 | 0.84 | 0.85 | 0.85 | 0.87 | 0.89 |
| Other expenditure | 0.02 | 0.01 | 0.01 | 0.02 | 0.05 | 0.03 | 0.01 | 0.01 | 0.00 |
| Total | 5.30 | 15.13 | 16.72 | 16.89 | 17.35 | 17.47 | 17.60 | 17.89 | 18.03 |
| Surplus (+) or deficit (–) | 3.71 | 0.77 | – 0.20 | – 0.05 | – 0.43 | – 0.62 | – 0.79 | – 0.37 | 0.45 |
| Reserves [2] | 3.44 | 5.42 | 5.38 | 5.32 | 4.93 | 4.24 | 3.42 | 3.05 | 3.50 |
| Revenue | Annual percentage change | | | | | | | | |
| Contributions for employees | – | 26.8 | 2.5 | 1.7 | – 2.5 | – 1.9 | – 0.6 | 3.9 | 7.9 |
| Contributions for unemployed benefit recipients | – | 31.0 | – 21.7 | 2.3 | 9.3 | 6.5 | – 1.2 | 26.3 | – 2.6 |
| Contributions from pensions | – | 30.5 | 2.0 | 1.6 | 10.1 | 3.8 | 1.6 | 0.5 | 0.5 |
| Total | – | 27.8 | 1.1 | 1.9 | 0.4 | – 0.4 | – 0.2 | 4.2 | 5.5 |
| Expenditure | | | | | | | | | |
| Non-financial benefits | – | 76.7 | 4.3 | 2.9 | 3.6 | 1.8 | 1.9 | 2.6 | 1.7 |
| Financial benefits | – | 3.8 | – 1.6 | – 3.0 | 0.0 | – 1.4 | – 1.0 | – 1.0 | – 1.4 |
| Administrative expenditure | – | 26.4 | 0.6 | 2.0 | 2.6 | 1.9 | – 0.2 | 2.8 | 1.8 |
| Total | – | 38.4 | 2.2 | 1.0 | 2.7 | 0.7 | 0.8 | 1.6 | 0.8 |

Source: Federal Ministry of Health. Final annual outturn according to PJ1 statistic, cash flow outturn for 2006 according to PV45 statistic. — **1** D-Mark figures converted to euro. — **2** Liquid resources at the end of the year. Excluding the temporary reduction of the reserves through the investment loan to central government for the years from 1995 to 2002.

Deutsche Bundesbank

Recipients of public long-term care insurance benefits




Deutsche Bundesbank

ancy will be that people will stay relatively healthy for longer (so-called "compression hypothesis"). If the probability of needing long-term care does indeed depend less on a person's absolute age than on the nearness of death, an extrapolation based on constant age-specific long-term nursing care probabilities would overstate the future development of long-term care needed.[8]

*Expenditure limited by fixed benefit rates*

However, the fixed nominal benefit rates under the legal status quo tend to counteract the demographically induced financial problems so that there is no additional expenditure pressure on the level of benefits per long-term care case. On the revenue side, the expected annual growth in wages and salaries is likely to offset the declining number of contribution payers. Given constant age-specific probabilities of requiring long-term care, the quantitative deterioration in the ratio of contribution payers to long-term care patients could be completely neutralised by the increase in *per capita* wages and salaries in the long term.[9] In this scenario, a contribution rate of 1.7% (plus the special contribution for childless persons) would be sufficient to finance expenditure on a lasting basis. However, the system would have to withstand deficits for a period of around 25 years. Constant surpluses can only be generated in this scenario if the growth in the number of long-term care patients slows down, in particular, because the less populous generations born in the mid-1960s or afterwards will be moving into higher age categories.

8 Corresponding projections are generally based on data for age-specific long-term care needs from the Federal Ministry of Health. However, these are available only for groups spanning five age cohorts in each case and for those aged 90 or over only as a single undifferentiated group. If, with the increase in life expectancy, the number of persons well over the age of 90 and the probability of them requiring long-term care as they age rises, the calculations based on these data understate the future volume of expenditure. The lack of specific age groups for those over 90 thus already partially presupposes the validity of the compression hypothesis.

9 The wage development used for the Federal Government's projections for financing the statutory pension insurance scheme was used. In this scenario, the growth rate of average remuneration increases from 2% to 3% between 2010 and 2020 and then remains at this level.

*Without dynamised benefits, hardly any pressure on the contribution rate ...*

One reason for this very positive perspective is the assumed wage development. Furthermore, as nominal benefit rates are fixed, their real volume decreases significantly over time. With an assumed future increase in the price level of 2% per year, the real value of the benefits in comparison to 1995 will decrease to 53% by 2030 and to 35½% by 2050. Long-term care insurance cover would therefore be reduced and the necessary patient co-payments would continuously increase. Hence the possibility of dynamising benefit adjustments is currently under discussion. For example, one suggestion is an automatic annual adjustment equivalent to the average of nominal wage growth and the general inflation rate.[10] To justify this dynamisation factor, which is essentially below the rate of wage rises, it is argued that, although the potential for raising productivity in the labour-intensive long-term care sector is limited, incentives to cut costs should remain. If this variant for dynamising benefit adjustments were adopted, the contribution rate would have to be increased to just over 2½% by 2030 and to over 3½% by 2050.[11] However, this does not take demands for further extending the range of benefits into account. For example, there are complaints that the current definition of the need for long-term nursing care is too closely tied to physical health and disregards the need for physically healthy persons suffering from dementia to be provided with long-term care. Any extension to the existing range of long-term nursing care benefits, however, would lead to a corresponding increase in the contribution rate.

*... with dynamic adjustment an increase in the contribution rate is inevitable*

## Individual aspects of the reform debate

*Coalition agreement envisages accumulation of reserves and expansion of benefits*

In view of the emerging problems regarding the public long-term care insurance scheme, various changes to the existing system are being discussed. In the coalition agreement of autumn 2005, the need to build up a demographic reserve fund in the form of funded components in the public long-term care insurance scheme was emphasised. As the benefit levels of the public and private long-term care insurance are almost identical, a risk structure equalisation scheme was planned between the two systems which would leave capital reserves already formed in the private insurance sector untouched. Furthermore, the coalition agreement envisages that benefit rates will be dynamised and the long-term care needs of persons suffering from dementia will be better taken into account.

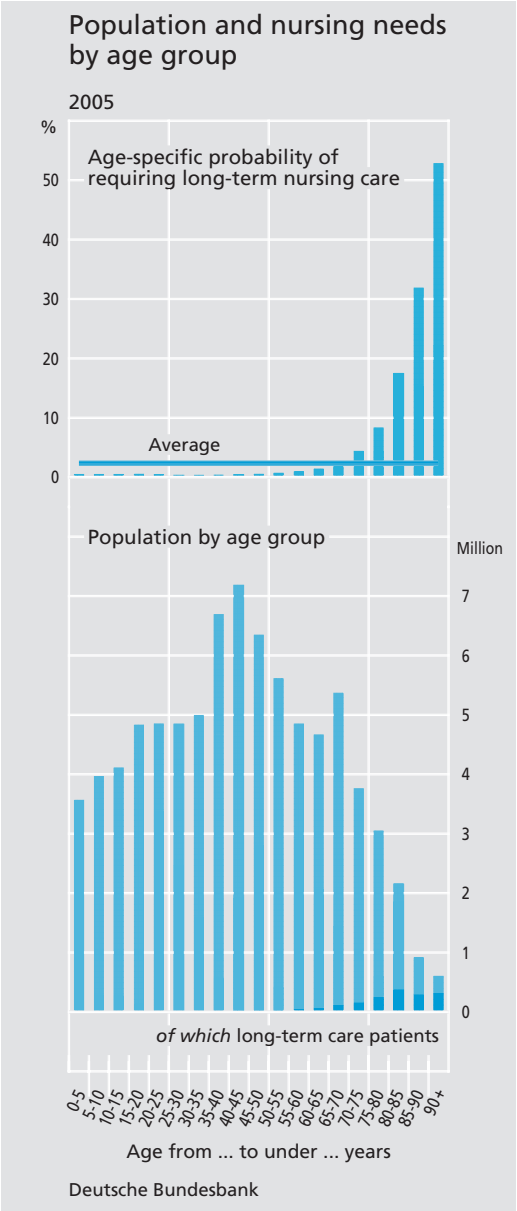
### Dynamisation of benefits requires additional funds

*Dynamisation would lead to rising contribution rates*

Owing to the ageing of society, dynamising long-term care benefit rates in order to avoid a real devaluation of benefits would lead to rising contribution rates. The extent of this depends – as outlined above – on a number

10 See: The Commission for Achieving Sustainability in the Financing of the Social Security Systems ("Rürup Commission") Berlin 2003, p 202 (in German only). Owing to the assumed long-term wage growth 3.0% and an inflation rate of 1.5%, an adjustment rate of 2.25% per year for long-term care benefits was calculated.

11 Comparable conclusions are reached, for example, by J Häcker and B Raffelhüschen "Wider besseren Wissens: Zur Finanzierbarkeit Demenzkranker in der Gesetzlichen Pflegeversicherung", discussion papers from the Institute for Public Finances of the Albert-Ludwigs Freiburg University in Breisgau, No 127/2005, p 6.




of factors including, in particular, the demographic scenario, the development of the contribution base (employed persons' wages and pensions) and the concrete dynamisation rule. However, the more the dynamised adjustment of benefit rates is below the average growth of wages, the lower the increase in contribution rates required. Ultimately, the dynamisation of benefit rates would determine the extent of future insurance cover against the risk of requiring long-term care in a pay-as-you-go social security system.

## Reform approach within the existing system

*Potential savings through avoiding in-patient care*

When the public long-term care insurance scheme was introduced, there was initially a large recourse to financial benefits, from those providing care for a relative, for example. However, there has since been a gradual evolution towards professional care services which are paid as non-financial benefits. This is probably related to initial efforts in the introductory phase to arrange (continued) care within the family, which then gradually declined in favour of the care services increasingly appearing on the market. The changing trend in family structures (higher labour market participation rate, childlessness, small families) will mean that care within the family will play a continuously and possibly exponentially diminishing role in future. Additional expenditure on long-term care insurance is therefore inevitable. On the other hand, the financial burden could be eased considerably if there were a shift away from in-patient care towards out-patient care provided by professional services.

## Involvement of private long-term care insurance

*Calculation of contribution rate for private long-term care insurance*

The introduction of a risk structure equalisation scheme between the private and public long-term care insurance systems envisaged in the coalition agreement was made somewhat easier by the fact that the range of benefits provided by the two systems is prac-

tically identical. However, the calculation of the contribution rates is based on quite different principles in the private insurance sector where, to a large extent, risk-related premiums are calculated independently of the insuree's income. Provisions with protected ownership rights are set up in order to take age-related increases in expenditure into account and to smooth the level of premiums over the insured person's life.

*More favourable risk structure does not necessarily justify introducing a risk structure equalisation scheme*

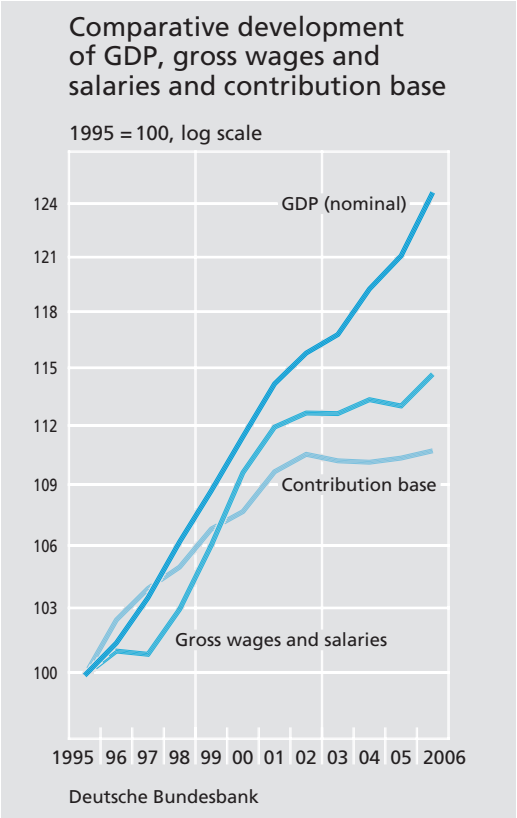
At first glance, the risk structure in private long-term care insurance schemes seems significantly more favourable than in the public scheme. In 2005, for example, of 100 privately insured persons, only 1.3 were receiving benefits; in the public system the figure was 2.8. Owing to the different designs of the two systems, however, these figures are not directly comparable. While in the pay-as-you-go system it is the risk distribution among insurees at a certain point in time that is relevant (cross-sectional view), systems with age-related provisions are oriented to the development of the long-term nursing care risk over time (longitudinal view). For example, a disproportionately high share of older insurees in pay-as-you-go public insurance systems creates an entitlement to social equalisation. In contrast, differences in age structure are irrelevant for funded insurance schemes. A below-average instance of long-term care patients owing to a relatively favourable age pattern of the insurees does not therefore justify obligatory equalisation. If a private long-term care insurance scheme with a relatively large number of younger members and a correspondingly low proportion of persons receiving benefits were obliged to make equalisation payments, it would not be able to accumulate sufficient provisions or would have to increase premiums even if its age-adjusted risk structure was no more favourable than that of the public long-term care insurance scheme. An equalisation mechanism between private and public long-term care insurance schemes would therefore at least have to adjust the probabilities of requiring long-term care for the differences in age structure and, owing to the differences in the basic design of the two systems, would soon come up against further limitations.[12] The general taxation system would therefore seem to be a more suitable means for achieving income redistribution.

## Financing by means of flat-rate premiums or a "citizens' insurance model"

*"Citizens' insurance model" vs flat-rate premiums*

The financing systems that have been discussed with reference to the statutory health insurance scheme could also be applied to the public long-term care insurance scheme. For example, the contribution base could be broadened by expanding the amount of income subject to insurance deductions (eg to include rental and capital income and income over the current ceiling for the assessment of contributions) and the group of contributors (eg to include civil servants, self-employed persons and privately insured persons with an income above the threshold for opting out of the statutory insurance scheme). Alternative-

12 For a possible concept for a risk structure equalisation scheme between public and private insurance schemes, see D Göpffarth und K-D Henke, Finanzierungsreform und Risikostrukturausgleich – Was bleibt vom Ausgleichsverfahren, Jahrbücher für Nationalökonomie und Statistik, vol 227/1, 2007, p 39 ff.




ly, a transition to a system of non-income-related flat-rate insurance premiums could be considered.[13]

*"Citizens' insurance model": immunisation against the erosion of traditional employment*

The "citizens' insurance model" would counteract the effects of what could be a sustained structural shift in working life towards increased self-employment (not subject to social security contributions) on the finances of the public long-term care insurance scheme. However, the statutory social security system would then be expanded, resulting in an increased overall burden of taxes and social security contributions. The implicit taxation of those already insured under the public scheme would decrease, at least in the short term – albeit to the detriment of newly compulsorily insured persons.

*Flat-rate premium would strengthen insurance principle and enhance transparency*

By contrast, the introduction of a flat-rate premium would strengthen the insurance principle of the long-term care insurance system and, not least, enhance transparency. The average cost of insurance cover against the risk of requiring long-term nursing care, at just over €20 per month for each insured person, would be transparent for all parties concerned. Furthermore, decisions regarding a politically desired social equalisation between higher and lower-income earners could be placed on a clearer footing and then implemented in the context of the general taxation and transfer system. The redistribution of income would no longer be carried out via a separate proportional "wage tax" with a ceiling for the assessment of contributions, but via the overall tax system. By collecting non-income-related contributions, the financial base of the public long-term care insurance scheme would be less adversely affected by the demographic structural change from employed persons to pensioners and the corresponding curbing of income currently subject to compulsory insurance.

## Capital funding for future benefits

*Models for increased capital funding with different transitional costs*

In the pay-as-you-go public long-term care insurance scheme, increasing costs must be met by future contribution payers. In order to restrict the financial burden on them, it is suggested that there should be a move away from pay-as-you-go financing towards greater capital funding. The various models differ both in terms of the speed and scope of the

13 See Deutsche Bundesbank, Financial development and outlook of the public health insurance scheme, Monthly Report, July 2004, p 27 ff.

accumulation of reserves and the reduction of the pay-as-you-go component. They range from a complete transition to capital funding for all who have not yet reached a certain age to suggestions involving only a temporary accumulation of reserves. A transition would certainly be accompanied by some initial increases in expenditure. For a transitional period, citizens would need to make their own financial provisions and older persons would have to be given support, as they do not have enough time to make sufficient self-provision by means of affordable contributions.[14] In this regard, the "Rürup Commission" has suggested imposing a special contribution on pensioners and using this additional income to form a capital stock.[15] If dealing with this transitional problem were to be viewed as a task for general government, tax financing could also be considered.

*Capital funding within and outside the system*

Capital reserves can be formed within the public long-term care insurance scheme.[16] However, experience shows that collective reserves tend to lead to the temptation to expand benefits. Although individual savings are better protected from this phenomenon, they do not directly help to ease the burden on future generations. The most effective option would be a complete changeover to private long-term care insurance with a risk-appropriate calculation of premiums and age-related provisions with protected ownership rights. However, as with the debate on flat-rate premiums, a political decision would have to be taken as to what extent the change of system would be accompanied by social equalisation for persons with a low income and how the transitional burdens would be distributed among the generations.

*Reducing pay-as-you-go financing can ease burden on future generations*

Cutting back the pay-as-you-go systems of social security and correspondingly strengthening funded components could lead to an intergenerational redistribution shift in favour of younger age groups. They would be less affected by the rising contribution rates or deterioration in benefits that would otherwise occur. It would be the generation undergoing the transition – which differs according to the transitional scenario – that would bear the brunt of the burden. Given the fact that the long-term care insurance scheme was introduced fairly recently, this group would include at least some of those who significantly benefited from its introduction. At the same time, it must be remembered that the transitional generation may be able to pass the burdens on to following generations. This could take place at an individual level in the form of smaller inheritances or at a general government level by financing the transition through borrowing. The impact of the intergenerational income redistribution effects ul-

14 See, for example, J Häcker, M A Höfer and B Raffelhüschen: "Wie kann die Gesetzliche Pflegeversicherung nachhaltig reformiert werden?", discussion papers from the Institute for Public Finances of the Albert-Ludwigs Freiburg University in Breisgau, No 119/2004 or German Council of Economic Experts, Jahresgutachten 2004/5, sections 546 ff.

15 See: The Commission for Achieving Sustainability in the Financing of the Social Security Systems ("Rürup Commission") Berlin 2003, p 200ff (in German only). However, in this case the capital stock is to be accumulated not according to actuarial principles, but mainly through a special contribution paid by pensioners which increases over time. After the projection period has ended (2040) increases in contribution rates could quite well become necessary.

16 In terms of the effect on the government's asset position, accumulating financial reserves within the government sector is equivalent to repaying government debt.

timately depends on the exact form that the transition takes in terms of increased capital cover.

*Changing the method of funding would not necessarily make the system more efficient*

A move away from pay-as-you-go to funded financing would not per se entail an improvement in efficiency. A generally expected higher return on the capital market would make it easier to finance the long-term care insurance scheme. However, financing the transition would also entail certain costs, which would have to be discounted at the capital market rate. Without any further assumptions regarding the relative distortional effects of the contribution rate in the existing long-term care insurance scheme in comparison to financing the transition through, say, taxes or borrowing, no reliable allocation improvements can be derived from a change in the financing process.[17]

## Concluding remarks

*Expansion of pay-as-you-go system means shifting burden into the future*

The introduction of the long-term care insurance scheme in 1995 further expanded the pay-as-you-go social security system in Germany. Just like debt-financing, this will entail a redistribution of income – owing in part to the ageing of society – to the detriment of future generations and in favour of current generations, a fact which may well have made the scheme politically easier to introduce.

*Reform of long-term care insurance scheme on the agenda*

The financial reserves of the long-term care insurance scheme will be exhausted in the near future. Although awareness of the need for fiscal policy action has been significantly sharpened in view of the ageing of society, the fixed nominal benefit level is increasingly viewed as being insufficient and so a dynamised adjustment of long-term care benefit rates is being called for. A reform of the long-term care insurance scheme is therefore on the agenda. An ageing population will inevitably lead to rising long-term nursing care costs in the future. This fact remains, regardless of what institutional framework is chosen to cover long-term care risks.

*Strengthening contribution equivalence and restricting shift of burden into the future*

In the current debate, the political objectives of reform efforts are often defined as follows: to strengthen contribution equivalence in the social security systems coupled with the transparent and focused financing of general income redistribution through the tax system, to restrict the burden on future generations, to emphasise self-provision and to focus the bulk of government social transfers on those with a real need. Against this backdrop, it would seem appropriate to take a cautious approach to dynamising benefit rates and expanding the benefit range financed through the pay-as-you-go system and to try to curb the contribution burden. Remaining gaps in benefits could then be closed by introducing targeted mandatory self-provision.

*Separation of insurance and income redistribution*

Another possibility would be to generally collect flat-rate premiums instead of income-dependent contributions in future and to shift the task of redistributing income entirely to the tax and transfer system. Such a restruc-

17 See Deutsche Bundesbank, Prospects for, and obstacles to, a stronger reliance on funding in the public system of old-age provision in Germany, Monthly Report, December 1999, p 15 ff.

turing of the contribution system would place a burden on lower income earners; however, this could be countered by a tax-funded social equalisation component which would then be more selectively based.

*Expansion of benefits financeable in the short term associated with follow-up costs in the long term*

The currently positive macroeconomic trend must not blind anyone into overestimating the long-term financing possibilities. When calling for the dynamisation of benefit rates and an expansion of the benefit range, the medium and long-term consequences should be carefully examined and verifiably and transparently documented in long-run calculations. Not least the lessons learned from the extension of benefits in the statutory pension insurance scheme in the 1970s and the extensive debt-financing of government budgets in the past should be borne in mind; promises of increased government benefits that are not associated with a direct burden in the short term, and may therefore be more easily politically enforceable, may necessitate correspondingly larger and painful countermeasures in the long term.