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Pensions, Health and Long-term Care

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1 Executive Summary

Luxembourg's social security system is largely based on principles of solidarity, which guarantees generous pension benefits as well as universal access to comprehensive health and long-term care services, and is financed as a PAYG system with large governmental participation.

The 2009 introduction of uniform social security status for all private-sector employees has brought far-reaching structural changes to the social security system, equal rights for manual workers and other employees under labour and social legislation, and harmonisation of social security contributions and benefits.

Policy-making is characterised by consensus and concerted action, which for a long time has not been challenged by major economic constraints such as budget deficits or unemployment, which would place the social security system at risk.

Despite its currently wealthy financial situation, the social security system is subject to a number of risks, which may in the long-run and without any countermeasures leave it precariously in deficit. These are, firstly, the change in the system's demographic profile. Based on a today's beneficial high percentage of relatively young workers, the same people will, in the future, represent a bulk of pensioners requiring a large volume of benefits. Secondly, its generous benefit entitlements in all pillars are estimated to create legitimate claims of high pensions. An enormous demand for comprehensive and advanced health and long-term services can further be expected. And thirdly, the ageing of the population will also put pressure on the sustainability of public finances of the Grand Duchy of Luxembourg, as all expenditure for pensions, health and nursing care is dependent on public co-funding.

Thus, the system's long-term viability will either require continuous and sustainable economic and employment growth, or will challenge future generations with much higher contributions, potentially combined with less benefits.[1]

In order to evaluate the financial sustainability of the pension system, regular actuarial studies are undertaken in all fields, based on aggregated data on the number of contributors and beneficiaries as well as average amounts of wages, contribution and pensions, and increasingly also including case models and micro-data to better analyse the impact and adequacy of policy measures.

In health and long-term care, many endeavours are undertaken to improve the quality of services and make the system more transparent. Currently the poor quality of medical documentation by international standards jeopardises comparative statistical analysis, and also negatively affects solid health and long-term care planning, the negotiation of fair tariffs and the combat of fraud and abuse.

The following report shows that Luxembourg's social system is still in a favourable demographic and financial situation that allows preparation for an effective reform without putting the fundamental structure of the system in danger or being compelled to introduce sharp cuts in benefits. There is still ample room for a variety of measures and, in particular, the substantial pension fund reserve makes it possible to prepare for a sound reform concept with all parties concerned.

The overall steering of the social security system by tripartite or quadripartite committees, always involving Government and social partners and, in health care, also provider representatives, is now required to prove whether it is able to meet the needs for change,

[1] European Communities 2009, 23-26.

especially against the backdrop of economic and financial constraints. The past has shown that it is almost impossible to gain agreement for either a common conceptual orientation or an integrated organisational functioning. Here the crisis might give the opportunity to identify and also implement new approaches necessary to make inherent efficiency gains and to realise saving potentials.

2 Current Status

2.1 Pension

2.1.1 Overview of the system's characteristics, reforms, debates, political discourse and scientific assessment

The public pension system in Luxembourg is organised as a pay-as-you-go system (PAYG) and covers the whole economically active society on a mandatory basis. Since 1911, the system has evolved from a blue-collar workers' plan and reached its current universal dimensions as long ago as 1964, when it encompassed independent workers as the last eligible group. Over the years, the four original private sector schemes were harmonised.

Pension benefits are calculated on both length of contributions and the accumulated lifetime amount[2] and are linked to two indices: consumer-price and wage index. Price-linking becomes automatic as pensions directly follow increases in the consumer-price index. If the six-monthly cost-of-living index exceeds the index for the preceding period by 2.5%, an index-linked increase is made to pensions the following month. Wage indexation, on the other hand, is done bi-annually by means of a specific law. Every two years the Government proposes to the Chamber of Commerce an appropriate wage indexation that takes into account the financial resources of the pension scheme and the development of the average level of wages and income.[3]

The old-age pension is composed of three major shares:

- A lump sum of 27% of the minimum income for up to 40 years of insurance career, taking into account both the periods of contributions and those countable periods without contribution (studies, child-raising, etc)
- A proportional share of 1.85% of the sum of lifetime contributable wages and income
- An increase of 0.01% of the proportional share for each contributable year exceeding both the age of 55 and 38 countable pension years (up to a total maximum of 2.05%)

The public pension system guarantees a minimum pension provision for an insurance career of at least 20 years. The minimum pension is set for a 40-year career and reduced by 1/40 for each missing year below 40.

In order to become eligible for a pension at the age of 65, a minimum of 10 contributable years have to be met. Early retirement is possible from the age of 60 by fulfilling a total of 40 pension or countable years with a minimum of 10 mandatory insurance years. In the case of

[2] Accrued benefit rights also encompass periods of involuntary unemployment and temporary work-incapacity due to illness and accidents.

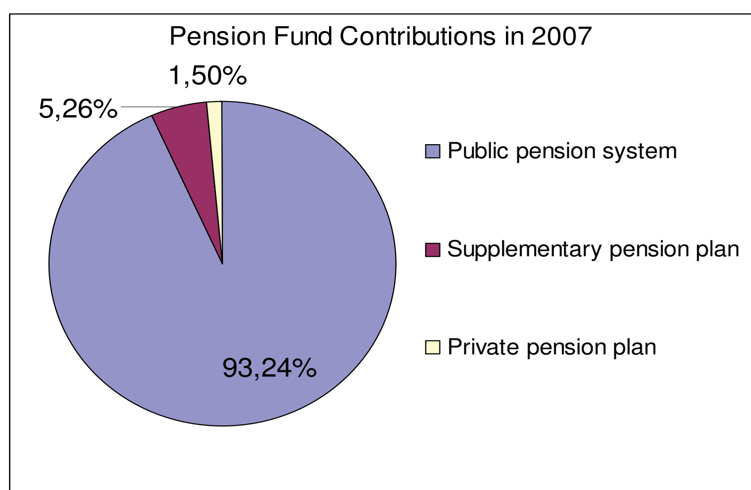
[3] Art. 225 of the Social Security Code. The latest increase of 2%, which equals the wage increase of 1.3% in 2006 and 0.7% in 2007, became effective from 1 January 2009. (Law of 19 December 2008). In contrast, in 2006 the Chamber of Delegates decided to postpone the January 2007 adjustments until July 2007 (by 1%) and July 2008 (by 0.9%) in order to consolidate public finances (Law of 22 December 2006).

40 mandatory insurance years, a person can qualify for early retirement from the age of 57 onwards.

Governmental reports and analyses on the pension system are regularly made available for the public through the governmental websites (www.etat.lu). The members of the pension funds are informed via mail on a yearly basis about their acquired years of pension rights. A preliminary determination of the pension amount to be expected is only made on request. However, according to the AXA pension survey 2007, only 25% of the active population is aware of the amount of their future pension.[4]

The second and third pension tiers only play a minor role in Luxembourg. Based on an estimated overall contributory amount of EUR 3,543 million in 2007 to all pension systems together[5], the public system alone represents 93.2% of all pension investments, followed by the supplementary company-based pension plan with 5.3%, and the private insurance-based plan of the third tiers with 1.5%. Less than 10% of the resident population gain from the third tier.[6]

Graphic 1: Annual contributions to the different tiers



Source: IGSS 2009, Kneip 2008, Commissariat aux Assurances 2009, own calculations

The financial model of the public system is based on a contribution rate fixed for a period of 7 years, a government participation of 1/3 of the individual pension contribution (= 24% of gross salary in total)[7] and a reserve fund for compensation. Thanks to the extraordinary economic growth over the previous decades and the significant share of resident foreigners and cross-border workers in domestic employment,[8] the accumulated reserve amounted to 3.5 times yearly expenditure in 2007, which equals 25% of GDP.[9] Furthermore, cautious

[4] AXA 2008, 37.

[5] www.statsecu.lu, Pension Insurance, Données financières, [RG/AP/IGSS,2007]; Kneip, 5; Commissariat aux Assurances, 2009; own calculation (as any information for the second tier is only available for 2003, the increase in contributions between 2003 and 2007 has been set equivalent to the public system.

[6] Commissariat aux Assurances, 2009.

[7] The contributions get paid in equal shares of 8% by employers, employees and the state.

[8] The enormous boom between 1980 and 2000 with an average growth in GDP of more than 5% has also led to a substantial increase of migrant and cross-border workers. Consequently, the share of foreign population rose from 18% in 1970 to nearly 37% in 2001. In domestic employment, the share of Luxembourg nationals has dropped to 35.5% in 2001, while shares of resident foreigners and cross-border workers represented 27% and 37.5% respectively.

[9] At the end of 2007, the total reserve fund corresponded to 32.8% of current expenditure and amounted to EUR 8,046.4 million (IGSS, Nov 2008, 212).

investment rules (less than 2% is invested in shares) grant Luxembourg's pension fund respite from the hazards of the current financial and economic crisis.

Despite its currently wealthy financial situation, the pension insurance system is subject to a number of risks, which may in the long-run and without any countermeasures leave it precariously in deficit:

- Low effective retirement age due to early retirement.
- High unemployment and work incapacity of older people aged 55 to 64 years.[10]
- Change of general demographic pattern, characterised by an increasing life expectancy in combination with an exceptionally large number of new retirees from 2020 due to today's disproportionately high young foreign and domestic labour force.
- Very generous pension benefits with an average replacement rate close to 100%.

In order to keep the financial system in balance, the General Inspection of Social Security (IGSS) re-analyses the financial situation of the pension fund every seven years, which last happened in 2005. In 2005, the actuarial projections encompassed for the first time a long-term period until 2050. IGSS estimated the level of public spending on pensions at roughly 16.7% of GDP in 2035 and 23.9% in 2060,[11] which will by then greatly exceed the EU average.[12] This approach gave rise to doubts for the first time about the system's financial sustainability.

In response to the upcoming debate, a national pension working-group, composed of representatives of various ministries, IGSS, pension fund managers and social partners, was established in autumn 2007. This committee has been entrusted with evaluating the system's performance and developing strategies to adapt the pension system to demographic and structural changes in order to guarantee future pension commitments with stable, adequate revenues, and also to safeguard the achievements of a minimum pension based on both inter-generational and cross-generational solidarity. Questions on how to increase the effective retirement age and how to overcome drawbacks related to work incapacity and professional reintegration measures are central to this discussion. This group is currently considering a series of channels to ensure the sustainability of the pension system. The group uses as its main reference source the projections undertaken by Luxembourg experts in 2008 in the framework of the EC Ageing Working Group (AWG). The report has recently been finalised and was published on 21 April 2009.[13]

Right before the economic crisis, Luxembourg reported an average employment growth of 3.7% in the period from 1996 to 2006.[14] The employment expansion has benefited foreigners in particular, whose number has increased in the above-mentioned period by nearly 50%, but also brought across some domestic negative labour effects such as low employment rates among Luxembourg elderly people and young professionals.

The last year's projections mentioned follow a methodology defined by AWG. The new scenario now derives from a 2060 horizon based on assumptions of average workforce growth of around 0.5% of productivity (1.7%) and of the economy in general (2.2%) between the

[10] In 2006, the average retirement age was 58, representing one of the lowest of EU-Member States. In contrast, life expectancy increased for women at the age of 60 from 78.8 years in 1970 to 84.4 years in 2006 and for men from 75.1 to 80.7 respectively. (Statec 2007, 26-28). Recent Eurostat projections for 2060 anticipate a further increase of 5 years for both women and men (Eurostat EUROPOP 2008).

[11] European Communities 2009, 88.

[12] OECD 2008, 82.

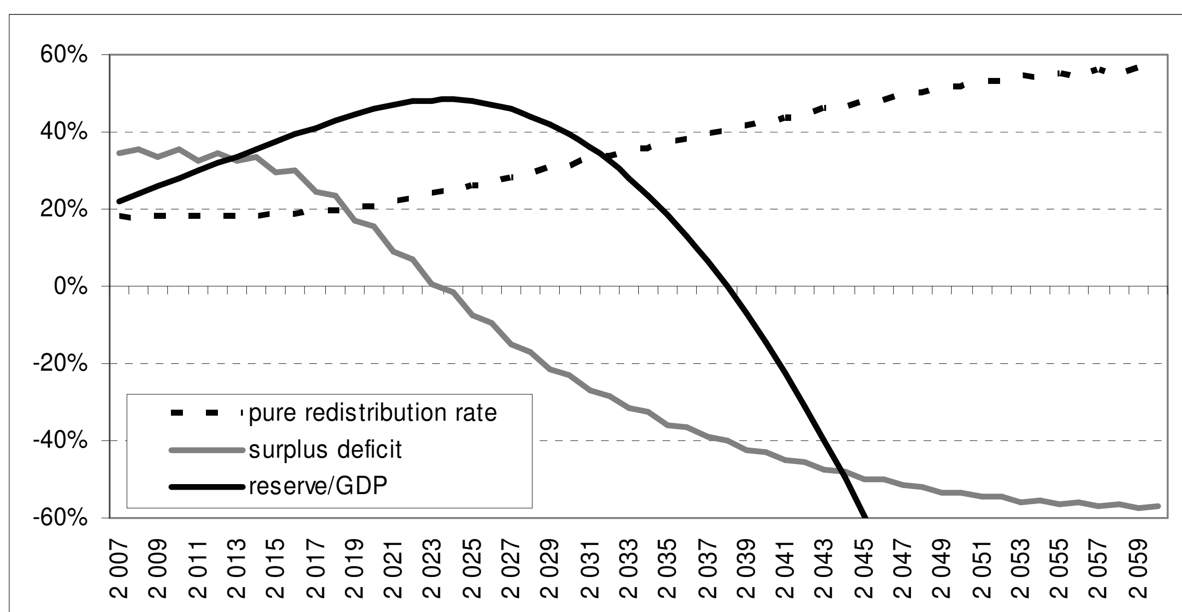
[13] European Communities, 2009.

[14] OECD 2008, 25.

period from 2020 to 2060. Concerning demography, the long-term fertility rate is set at 1.7%, according to Eurostat EUROPOP2008 projections, and a long-term net migration at 2,800 persons per year. The projections show that despite an initial retirement wave in 2020, the system will continue allocating surpluses to the reserve until 2025.[15] From that point, the deficit will rise continuously. Limited to customary remedies, this endeavour appears to be unrealistic:

- Increase in contributions: as a single countermeasure (pure redistribution) it will rise constantly up to 60% by 2060.
- Increase of employment by 2.6% annually, which will amount to nearly 1 million non-resident workers compared to 250,000 residents by 2060. Higher productivity could still partly replace this impossible growth of labour.

Graph 2: Development of the general pension system in the medium and long run



Source: IGSS, 2009

With the aim of maintaining financial viability even in a 50-year perspective, the experts went through some scenarios by applying a simplified case model developed by the OECD.[16] It was based on a typical average employee with a 40-year career starting at the age of 20.[17]

The basic scenario result for pensioners is a gross replacement rate of 89% and requires employment growth of 2.35%. However, such a long average career will become more and more unlikely and does not sufficiently consider demographic changes. Thus, three alternative scenarios have been added for comparison purposes, one with a 35-year career starting at the age of 25 (resulting in a required employment growth of 2.5% to keep the financial balance), another with a 40-year career, entering working life at 25 and exiting at 65, which brings the

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[15] IGSS 2009, p. 53.

[16] QUEISSER, M. and Whitehouse, E., 2006 Neutral or Fair? Actuarial Concepts and Pension-System Design, OECD 2006. Pension at a glance – Public policies across OECD countries, OECD, 2007.

[17] At an aggregated level, the model reproduces the results of the highly developed actuarial calculations of the ageing working group of the EU Economic Policy Committee. The model is based on a capitalised pension system and assumes an annual interest yield of 4.35% which, in a pay-as-you-go system, implies a yearly increase of equal 4.35% to be hypothetically ensured by a yearly increase in productivity of 2% combined with an increase in employment, which in this case needs to be 2.35%.

required employment growth to 2%, and a last hypothetical 45-year career, resulting in required employment growth of 2%. The variation of replacement rate among the scenarios results from the current pension formula calculated according to the pension period.

Table 1: Case model scenarios: performance of the pension system in the case of three different pension careers

	Scenario	Starting age	Retirement age	Years of contribution	Contribution rate	Replacement rate	Necessary annual increase in employment
Contributable pension periods	1	20	60	40	24	89	2.35
	2	25	60	35	24	78	2.5
	3	25	65	40	24	90	2.0
	4	20	65	45	24	102	1.8

Source: Calculations IGSS 2009

The model highlights the positive effects related to measures that, as a first step, purely aim at the extension of working years, and, thus critically, scrutinises the discussion on early retirement. It also shows that the pension system gains more within the same contributable period from a later exit from employment (scenario 3) than from an early entry (scenario 1).

In addition, substantial reflection is also required with regard to three additional major obstacles:

1) Change of demographic pattern of the system:

   Today's beneficial high percentage of relatively young workers will in consequence lead to a growing number of pensioners in the future. IGSS expects that this growing volume of expenses will take effect in the 2020s and from then on gradually diminish the system's financial stability.

2) The generous pension benefits:

   As the level of pensions is based to a far greater extent on total lifetime earnings than on the number of contributing years (which in particular matters for minimum pension qualification purposes), the relatively high level of wages does result in a generous pension. In addition, no regulatory parameter is currently foreseen to correctively regulate the financial risks of the lengthening of retirement periods due to higher life expectancy.

3) Public finances under pressure:

   Costs associated with the ageing of the population will also put pressure on the sustainability of public finances of the Grand Duchy of Luxembourg.[18] In case increased contributions are necessary, it remains questionable whether the Government is able to enlarge its already considerable financial participation proportionally. The ageing population will create not only a new burden for the

[18] The Council of the European Union in its Opinion on the updated Stability Programme for Luxembourg has pointed to the danger to the public finances in view of the long-term budgetary impact of ageing, against which no measure has been taken so far (Council of the European Union, 7329/09, point 8), MF 2008, 28-30.

pension system, but also result in significant rises in expenditure for health and nursing care, both also depending on public co-funding. The weight of these expenditures in GDP is estimated to rise from 19.5% over the course of the 2004-2010 period to above 27% for the 2040-2050 period.[19]

Due to the crisis, these challenges are further exacerbated by the new phenomenon of rising unemployment, which showed a substantial increase of 30% between September 2008 and March 2009 alone.[20] This structural slowdown will ultimately drain the level of reserve earlier than expected.

In its 2008 projections, IGSS simulated two different scenarios to either increase the contributions or reduce the benefits:

a) Increase of the contribution rate to 33% (with 35 years of productive labour market participation): without changing the pension formula, the replacement rate remains equal to the basic scenario A at 78%, but reduces the annual employment growth necessary to balance the system by 1% (to 1.5%).

b) Change of pension formula resulting in a reduction of the replacement rate to 57%. As a consequence, the necessary annual employment growth will fall to 0.5%. However, scenario B allows to keep the current contribution level:

Table 2: Case model scenarios: Impact on replacement rate and required employment growth in case of a set contribution rate of 33% and annual employment growth of 0.5%.

	Scenario	Starting age	Retirement age	Years of contribution	Contribution rate	Replacement rate	Necessary annual increase of employment
Pension periods	Basic A	25	60	35	24	78	2.5
	Basic B	25	65	40	24	90	2.0
Fixed contribution	A	25	60	35	33	78	1.5
Fixed replacement rate	B	25	65	40	24	57	0.5

Source: IGSS 2009

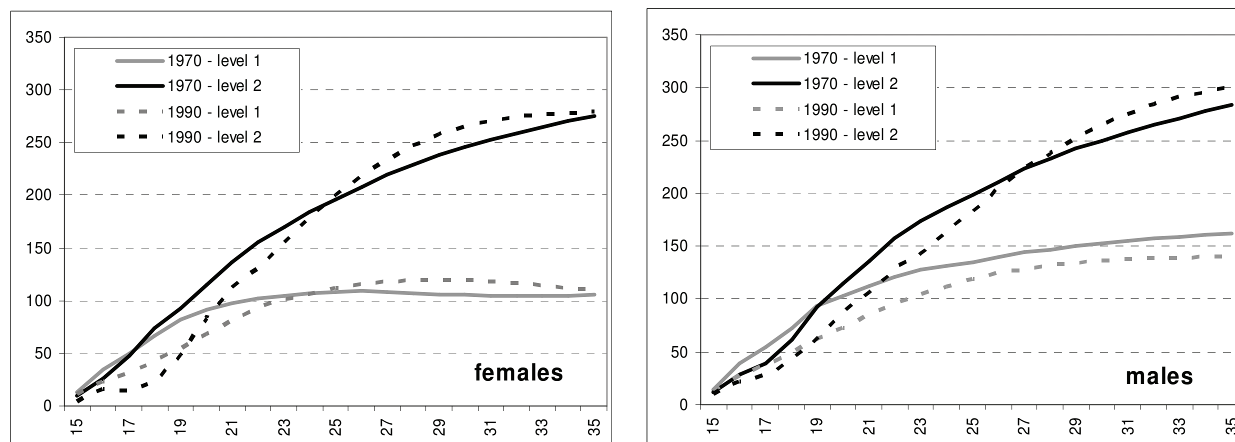
Whatever reform measure will be taken, it should firstly aim at preserving the living standards of people with lower income. They are more likely to have linear careers while those in high-wage careers show significant progression during their careers.[21]

[19] MF – 10th update of the Luxembourg Stability and Growth pact 2008, 28.

[20] ADEM 3/2009.

[21] The strong growth in the tertiary sector has also led to a change of educational level of the labour force. While university graduates accounted for only 15% among immigrants living in the Grand Duchy for over twenty years, their share reached nearly 45% for those who arrived during the last 5 years. Correspondingly, the weight of employees from primary education is decreasing dramatically. By comparing the educational level of immigrants upon arrival in Luxembourg in 2004/2005, the Statec labour force study of 2006 shows that about 50% hold a university degree against 28% of those from ten years before. The percentage of those with primary education dropped from 31% to 13% during the same period.

Graph 3: Evolution of income (in % of minimum wage) during the career, by income level (level 1: average income <2 times the minimum wage, level 2: average income> = 2 times the minimum wage) and by gender for cohorts who began work in 1970 and 1990



Source: IGSS 2009

Therefore the authors recommended implementing a reference replacement rate, which is adapted to linear low-income careers. Those insured with progressive careers can slowly become habituated to adding other pension products to their statutory pension (occupational pension, private insurance plan, real estate). Orientation in this direction is already given by some other countries (the Netherlands, Sweden) that provide such reference rates for career types, which are well known by all stakeholders in advance. Those insured opting for early retirement will then have to accept a lower pension level and others will be rewarded for staying in work longer.

Those measures could have good prospects for a common agreement.[22] They not only perpetuate the pension system's characterising paradigm of intergenerational solidarity, but also include maintaining a guaranteed minimum pension level, which for the last time has been reaffirmed by the social partners at the 2001 round table on pensions.

Age of retirement and life expectancy

Several analyses (OCED 2008, Statec 2007, IGSS 2005) underscore the huge gap between the effective and official retirement age (65 years) and show Luxembourg, at 59.2 years for men, at the bottom end of the OECD in the period 2002-2007.[23] According to data from the Statec Labor Force Survey of 2006, roughly 25% of male and about 10% of female residents have already gone into retirement at the age of 57. Considering early retirement pensions before the age of 60, to begin with, it appears that 60% of men and women are early retirees. The fact that 35% of manual workers but only 10% of highly qualified employees take early retirement demonstrates the significance of education and employment sector with regard to the time of labour market exit.

However, a closer look at the national statistics demonstrates that the changes in the employment rate of the elderly also differ according to education and population groups:[24] Older female nationals show an employment rate of 22.4% (2006), which has constantly

[22] On 23 April 2009, the pension report was presented to the Parliamentary Committee for Health and Social Affairs. On behalf of the social partners, especially the employer association complimented the authors for the objectivity of the report. Feist, 24 April 2009

[23] http://www.oecd.org/dataoecd/3/1/39371913.xls, Luxembourg (women): 60.3; OECD average: 63.5 (men) and 62.3 (women).

[24] Statec Labour Force Survey 2006, 9.

increased over the years, whereas the rate for male nationals (34% in 2006) remains more or less stable. Foreign employees (42.2% in 2006) become more dominant among the older workforce. Here, 48% of men and 37.6% of women in the 55-64 years age-group were still active in the labour market in 2006.[25] Foreigners and women are less likely to have acquired enough pension years to leave the job market before the age of 65. Furthermore, different careers in different countries result in a much lower replacement level for foreigners. Additional years really help them to upgrade their pensions.

Career interruptions (excluding baby-years) of new retirees from the general pension system between 2000 and 2005 are more prominent among women than among men.[26] Women have more than 13 years on average in the old age pension at age 65. In the case of men, even in old age pensions at 65, the interruptions are marginal.[27]

Several incentives aimed at the voluntary extension of professional careers, which were introduced by the 2002 pension reform, have not shown the expected results.[28] The incentive of an additional increase of 0.01% of the accrual rate for every year between the age of 55 and the final age of retirement is not of sufficient economic interest to stimulate postponement of the exit from employment after full pension rights have been accumulated. Similarly, as additional earnings during *part-time* early retirement lead to direct reduction of the pension (or its suspension for the self-employed) as soon as they exceed one-third of the minimum wage, the measure is also very little used.[29]

The comparison with the reported slight decrease in the employment rate of the elderly (between 55 and 64) from 33.2% in 2006 to 32% in 2007[30] might be seen as confirmation for the unattractiveness to remain in employment.

Another topic to be mentioned here is the effort undertaken on how to share acquired pension rights in the event of divorce. Draft legislation is under consideration on how to split the pension rights of couples, accumulated during their marriage, in the event of divorce. Various models have been developed searching for a fair distribution model without any positive or negative discrimination against single persons and couples who remain married. The analysis raised fundamental questions of civil law for determining the social security debts of one partner to another, which will have to be handled with absolute priority over any other assets. The issue is currently being tackled in close collaboration with the Ministry of Justice. The most likely solution is expected to include the individualisation of pension rights in the new divorce legislation which is expected to pass through the parliamentary procedure in the next legislative term starting in July 2009.

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[25] Lejealle 2008, 2.

[26] Lejealle 2008, 7.

[27] IGSS 2009, 75.

[28] Beneficiaries of an early retirement pension may continue to engage in a salaried activity as long as the income earned over one calendar year does not exceed one-third of the minimum wage. Otherwise, the additional income will reduce the pension according to the anti-cumulation provision of Article 226 CSS. In contrast, revenues of an independent or self-employed activity will be deducted from the pension in full (Art. 184 CSS). For survivors' pensions the anti-cumulation provisions are less strict and lead to partial reduction when the total income exceeds EUR 2,500 (Art. 229 CSS). Between 2000 and 2005 only 13% of survivors' pensions were reduced for surviving women and 3% for men. IGSS 2009, 78 NSR 2008, 47.

[29] AXA 2008, 15. Only 4-5% of pensioners pursue an additional paid activity. Among the active, more than 50% intend to continue a remunerated activity after entering retirement.

[30] Ibid., 23, Indicator OC-10.

Privately managed pension provision

The privately managed pension system differentiates between a supplementary pension scheme (second tier), established by private undertakings for a certain category of employees, and private pension plans (third tier) offered on an individual basis by financial institutions.

The legal framework of the law of 8 June 1999 puts the various company-based supplementary pension regimes on an equal footing with regard to internal and external financing and tax provisions. It also stipulates the rights of entitled claimants. The individual employment contract needs to specify the nature of the entitlements (retirement, death, survival or invalidity). In case of a change of company, the vested rights can be either transferred to a supplementary pension scheme or to a duly approved external scheme. Certain conditions further allow repurchasing of the vested rights, such as leaving the company for a foreign country if aged 50 or over at the time of leaving, or if the entitlements for annuities or capital remain below a defined threshold. Companies are obliged to be covered by insolvency insurance or a pension security fund in order to guarantee the vested rights of the pension fund members. Contributions for supplementary pension benefits stem from taxed income, and hence pensions are not subject to taxation. Personal contributions by the employee, if any, are deductible up to an annual amount of EUR 1,200.

Private pension plans are offered as financial products to individuals. They are governed by Art. 111bis of the Income Tax Law of 11 December 2002 and the Grand-Ducal regulation of 25 July 2002. They enable everyone to take out complementary pension provision to supplement the state pension system, and allow tax deduction on an amount of income between EUR 1,500 und EUR 3,200 per year, depending on the age of the policy holder. Benefits are paid from the age of 60 at the earliest. The beneficiary can opt to receive up to a 50% share of the accumulated savings as a lump-sum capital payment. The remaining part is paid in the form of an annuity. 50% of both capital and annuity benefits are taxable at the time of their receipt. The tax concessions offered for private pension plans are by far the major incentive to join, and, thus, to complement the public pension. However, the public system is neither subject to any restrictions nor has it declined in efficiency; privately managed pensions have neither become very popular nor are they considered financially substantial.

Unfortunately, official statistics are not published for any of the privately managed schemes. However, in its press release for 2008, the Luxembourg insurance supervision (Commissariat aux Assurance) reports a total of around 42,654 contracts under the private pension plan with provisions of roughly EUR 334 million.[31] Comparing the new investments for 2007 of around EUR 53 million with the overall contributory amount of EUR 3.543 billion in 2007 for all tiers together,[32] it concludes that this type of pension insurance represents only 1.5% of the total amount invested into pensions. The same document further reports 1,373 participating companies under the supplementary pension scheme in 2003, with a supplementary pension investment volume of EUR 141 million, which compared to the revenues of the public system in the same year (EUR 2,500 million) seemed to represent 5% of pension investments[33]. As of the end of February 2009, IGSS registered 1,635 companies which have established one or more supplementary pension plans.[34]

Consequently, Luxembourg seems to have ample room to improve the information on privately managed pension schemes. With regard to the public debate, support for

[31] Commissariat aux Assurances, 2009.

[32] www.statsecu.lu, Pension Insurance, Données financières, [RG/AP/IGSS,2007]; Kneip, 5; Commissariat aux Assurances, 2009; own calculation.

[33] Kneip 2008, 5.

[34] Source: IGSS.

reconsidering the public pension formula and giving more importance to the second and third tier can only occasionally be observed.[35]

Property ownership is another form of private saving for old age and contributes greatly to social cohesion. In Luxembourg, a large percentage of people are private property-owners. The figures on the risk of descending into poverty (threshold: 60% below average disposable income) related to housing status show that in 2006, such risk is more than 3 times higher for people living in rented properties (30.3%) compared to those living in their own property (9.1%).[36]

Work incapacity

A very important impact on the rate of older people's employment is related to the disability and incapacity situation. 15% of the active population aged 50 or above leave their professional careers because of health difficulties or work incapacity. A total of 5% find themselves back in unemployment.[37] This demonstrates the importance of prioritising the prevention of work incapacity and measures for job retention for older workers, as well as supporting measures such as rehabilitation and redeployment programs.

As result of the redeployment policy implemented in 2002 with the objective to reduce work incapacity through professional reintegration, roughly one-third of people with partly reduced work capacity could remain in the labour market. They took advantage of the very successful internal redeployment arrangements and continue working for their previous employers. The employment fund compensates the residual salary based on the previous full-time employment.[38]

In contrast, external redeployment, implemented as alternative measure in 2002, has not proven to be effective. It applies to people with partly reduced work capacity who are unable to continue either in the job they previously held or in another one for their previous employer, and are consigned to the job market for one year as virtually "disabled unemployed", with little or no chance of being placed again. After this most likely frustrating experience on the outer periphery of the job market, a quasi-disability period will follow. The so-called "waiting allowance" then awarded is computed in a similar way as the level of invalidity pension and will later be replaced by the old-age pension. However, these definitely non-placeable workers continue to appear in the employment statistics. The system is a matter of considerable debate.[39] Following the OECD suggestion to tighten up the conditions of exemption and make employers more accountable for involving themselves in retraining and finding new jobs for their previous employees, the success of internal redeployment is likely to be broadened.

The disagreeable situation has brought the Government into action. An inventory of measures concerning work incapacity has been compiled, and an analysis has been carried out of the effectiveness and guidance given by the legal provisions on the internal and external reclassification possibilities as well as the costs thereof. The recommendations show room for improvements in the following areas:[40]

- Length of procedures for redeployment

[35] Pechon 2008.
[36] Statec 2007, 61.
[37] Statec 2007, 29, Genevois et al. 2005,46-48.
[38] IGSS March 2008.
[39] OECD 2007, IGSS 2008.
[40] IGSS March 2008, 78-85.

- Protection of persons affected by redeployment
- Standardisation of assessment of work incapacity
- Flexibility of measures undertaken and regular follow-up of recipients
- Prevention of incapacity
- Statistical monitoring procedures

At the beginning of 2008, an inter-ministerial working group was established to elaborate a reform strategy which takes into account the report's conclusions. The group is currently preparing a draft bill on this subject. With the prospect of the upcoming parliamentary elections in June 2009 and the relative complexity of this subject, which covers various policy areas in the fields of social security and labour, the proposal will most likely be submitted in the next new legislative term.

Minimum income provisions for older people

Little has changed concerning the high minimum pension conditions. With the completion of a 40-year insurance period (including voluntary and additional periods), a pension is not allowed to be inferior to 90% of a minimum income of EUR 1,683 in 2009.[41] This actually makes the replacement rate digressive. If an individual pension amounts to less than the minimum, the pensioner gets a supplement for the missing residual. In some case the replacement rate may be even higher than 100%. The same generosity applies to everyone who has completed or exceeded the minimum number of 20 pensionable years, whereas the minimum pension level is likewise reduced by the missing years. Survivors' pensions are subject to the same minimum levels.

25% of women make use of the possibility to purchase missed pension years within the meaning of Article 174 of the CSS. 8% have contributed on a voluntary basis (Article 173 CSS). In the case of voluntary insurance coverage, short periods are more frequent. Men's careers do not in general require such voluntary or retroactive purchase of pension rights.

In any case, the means-tested guaranteed minimum revenue (EUR 1,199 in 2009) applies to the elderly in the same manner as to the rest of the population. In the over-60 age-group, roughly 1.2% receive supplements to fill the gap, compared to 3% with respect to the population as a whole.[42]

In 2009, the former tax deductions allowable for employees and pensioners have been replaced by the law of 19 December 2008 concerning direct taxes with an annual tax credit of EUR 300, paid to every taxable person, which will enable people with little income to enjoy nominally the same advantages as high income tax payers.

As minimum income provisions for those who have not completed a full pension career are nearly as generous as minimum pension provisions, the adequacy of pensions does not pose a great challenge for Luxembourg.

However, the authors of the 2008 forecasts also query whether the unquestionable provision of a minimum pension should necessarily be maintained at the current level, which in the case of a full career with an income of less then twice the minimum wage results in a gross replacement rate of more than 100%.[43] Furthermore, many complementary periods currently

[41] Social parameters 2009, www.mss.public.lu
[42] NSR 2008, 9 and 64
[43] IGSS 2009, 84

allow the acquisition of 40 countable years without any contributions during the complementary years.

2.1.2 Critical assessment of reforms, discussions and research carried out:

In mid-2008, the OECD in its Economic Survey on Luxembourg had already emphasised the generosity of the public pension system by international standards. The survey drew attention to the very high replacement rate,[44] which in combination with increasing life expectancy will pose a major threat to the system. It should further be mentioned that given a high share of nearly 27% cross-border workers in the domestic labour market, the Eurostat projections of a future dependency ratio of 38% by 2050 is highly misleading, as these statistics do not include the cross-border workforce. As pensioners, these cross-border workers will at least partially receive benefits from Luxembourg's pension system and will have to be added.

In its conclusions, the OECD survey highlighted the potential remedies to cope with the burning issues of the pension system in the long run, which are absolutely in line with the current national debate:

- Further increasing the system's pre-funding to keep the system stable in the light of a forty-year horizon instead of the current seven-year approach.
- Raising the effective retirement age by first bringing early retirement to an end and thus enlarging the financial base.
- Lowering the replacement rate over a long horizon to both reduce expenditure and allow the population to adjust their savings patterns.

The recent report of the national pension working group demonstrates that the Government, employer associations and trade unions are seriously considering the viability of the pension system in the long term. The future mode of the financing system will determine how and to what extent the financial risks of the pension scheme need to be averted. The IGSS's and the EU AWG's extensive analyses[45] make obvious that more than spontaneous action is needed. However, any implementation of necessary pension adjustments first and foremost requires a social consensus to be found. Therefore, the reform measures should be well designed, putting neither the competitiveness of its economy nor the standard of living conditions nor its public credibility at risk, and should be presented in a comprehensible way.[46] To keep the current configuration of benefits, further continuous inflow of labour and economic growth remains vital. Therefore a future increase of the contribution rate combined with a rise in the effective retirement age seems to be the most probable option.

However, in the light of the still favourable demographic and financial situation, the reform options could have been even more far-reaching. A first attempt has been made by the presented scenario with a fixed replacement rate of 57%, and others can be read between the lines, without being recommended explicitly. The current financial and economic crisis means that stakeholders who have long hesitated to engage with pension issues are now open to such a discussion. In order to agree on a moderate decision that still lays down markers for the future, options to lighten the financial legacy left for future generations may be expressed

[44] The net replacement rate is about 96% in the case of a median income employee, who retires after an average 40-year career at the age of 60. For male nationals with an income below twice the minimum salary it reaches as much as 107%. (IGSS 2009, 56).

[45] IGSS 2009, European Communities 2009.

[46] Bley 2008, 79-82.

even more radically.[47] This includes limitations on the level of wage-related indexation of pensions, implementation of sanctions or bonuses for early or late retirement respectively, lowering of the replacement rate for the better-off, strengthening anti-cumulation provisions, re-considering the survivor's pension etc.

The first hurdle to overcome is to adjust the legal framework in a manner that allows planning beyond the current seven-year horizon. This should already apply for the next legal period between 2012 and 2019, so that it encompasses more critical retirement entries until at least 2030 or beyond.

In order to evaluate the financial sustainability of the pension system, regular actuarial studies are undertaken, based on aggregated data on the number of contributors and beneficiaries as well as average amounts of wages, contribution and pensions. Without disputing their value, they are not suitable for analysis of the impact of reform measures on, for example, the effectiveness, adequacy or equity of individuals' or households' net income. Here, typical case models and micro-data, collected through censuses and surveys, have the advantage of allowing analysis on subgroups of households with certain attributes (age, gender, income, working time, etc.). Thus, micro-simulation also helps to assess the impact and adequacy of pension policies in the long-run.

A first micro-simulation research project, REDIS, started in April 2007 with the aim of simulating the effects of the Luxembourg pension system on revenue distribution for people belonging to the same generation.[48] The project is funded by the National Research Fund and executed by CEPS/INSTEAD and IGSS, in collaboration with the Universities of Maastricht and Liège. In a first step, the redistributional effect of the tax reform of 2001 and 2002 on Luxembourg's tax-benefit system were analysed. It has shown that the reform led to a 6% rise in mean equalised income, with particular gains for the elderly and for younger people without children, and with a correlation between level of income and relative gain.[49] The researchers are now about to prepare the assessment of the redistributional effects of the 2002 pension reform, by comparing the current pension calculation model with alternative models, and extending its scope of application to behavioural reactions in case of changing co-payment requirements for health care.[50] The project gives confidence that the instrument of dynamic micro-simulation will enhance future social policy analysis in Luxembourg.

Better information on privately managed pension schemes would also be of great help towards gaining a distinctive picture of the pension situation as whole.

Finally, it is worth mentioning that in Luxembourg the concept of flexicurity is relatively underdeveloped, although many of the respective prerequisites have long been in place: self-employed people not only have equal access to the same public health and pension funds, but affiliation is also mandatory and the Government contributes to their individual pension at the same percentage as for employees (8%). The pension fund contribution for very low professional revenue is only computed for one third of the minimum wage, relevant in the start-up phase.[51] Even so, the self-employed only represent 5% of the total economically

47 According to the AXA barometer 2007-2008 on pensions, 60% of the active population and 47% of pensioners expect a pension reform in the next 10 years, of which 70% (79% of pensioners) assume an increase in working years and 64% (52%) a reduction in pension benefits. AXA 2008, 59-60.

48 www.fnr.lu, REDIS – Coherence of Social Transfer Policies and Microsimulation.

49 Berger, et al.,2008, 32.

50 Wagener 2008, 10.

51 Art. 180 of the Social Insurance Code.

active population.[52] The risk of self-employment, like the flexibility of the unemployed on the labour market, is likely to be reduced by very generous social security and welfare benefits.

2.2 Health

2.2.1 Overview of the system's characteristics and reforms, debates, political discourse and scientific assessment

Luxembourg's health care system is characterised by the principle of universal access to a modern, comprehensive package of health services. Affiliation to the public health insurance is mandatory for all economically active persons. It covers a comprehensive package of health services. Hospital infrastructure is modern and meets the latest technical standards. Patient satisfaction is high in relation to the care provided. According to a recent survey, 63% of the residents interviewed think that the systems only need minor changes.[53] They enjoy free choice of doctors and have direct access to specialists. In 2006, life expectancy was 81.9 years for women and 76.8 for men.[54]

Financing

In 2005, the reported total expenditure on health care (TEH) was EUR 2,329 million, representing 7.8% of GDP[55] and amounting to USD 4,153 PPP (in EUR: 3,341)[56] per insured person, which includes residents and non-residents.[57] Due to the comprehensive benefit package of the mandatory social health insurance system as well as the Government's huge investment in the health infrastructure, the public expenditure share of TEH amounts to 90.2%, the highest in Europe. Private expenditure accounts for 9.2% of TEH, including out-of-pocket payments and private insurance that only represents 2.3% of THE.[58]

Health Insurance

The public health insurance system is compulsory for all persons participating in the Luxembourg economy as employed, self-employed or recipients of replacement benefits (sickness, maternity and unemployment, invalidity, old-age and survivors' pensions, guaranteed minimum wage, etc.). In addition, derived rights are granted to non-insured family members. In sum, the system covers 96% of the resident population[59] and 188,000 non-resident people (= 30% of the total insured population!) are affiliated as cross-border workers

[52] www.statsecu.etat.lu, Personnes protégées: répartition selon les régimes (moyenne annuelle) [RG/PP/IGSS, 2007].

[53] TNS-ILRES 2009, Sample size: 484.

[54] Source: Eurostat, Life expectancy at birth, by sex (ind HC-P4a).

[55] Source: ECO-Health OECD 2008, total health expenditure as a percentage of GDP (ind HC-P12).

[56] Based on an annual average exchange rate for 2005 of USD 1 = EUR 0.80453.

[57] Source: Eco-health, OECD 2008 total health expenditure per head of population in PPP (ind HC-P11). The non-residents represent 30% of the total number of insured people.

[58] Source: ECO-Health OECD 2008, Expenditure on health by financing agent, % of total expenditure on health, 2005 (ind HC-C3).

[59] The group of the non-insured represents to a large extent EU civil servants residing in Luxembourg and affiliated to their own social security systems as well as some people covered in another Member State. In contrast to IGSS 2008 the OECD does include EU civil servants and thus reports coverage of 99.7% of total population. Source: Eco-health, OECD 2008.

(or family members thereof).[60] The cross-border population places the Luxembourg social security system in a favourable demographic situation. It is on average nine years younger and includes only 0.2% % of people over the age of 65 years.[61]

The state not only contributes directly, to a large extent to the health insurance (38% for benefits in kind), maternity (100%) and the long-term care insurance system (around 40%), but also pays the health insurance contributions for students and children without direct affiliation rights, as well as for people below the minimum guaranteed income.[62]

Despite the limited scope of private and complementary mutual health insurance benefits, which contain only supplementary coverage for the co-payment of the public scheme and certain first-class medicine services in hospitals, nearly 50% of CNS members opted for it, with a huge preference for the Caisse Médicaux-Chirurgicale Mutualiste, the mutual health insurance association for complementary health coverage.[63]

Health insurance is organised as a reimbursement scheme for members' expenses for a large variety of health benefits with an estimated average reimbursement rate of 91.8%. Only hospital care is offered as benefits in kind, with the exception of the doctors' bills that, similar to out-patient care, have been pre-paid by the patients themselves. Despite the fact that a few new measures led to slight increases of the co-payment level (i.e. 10% instead of 5% for the first GP consultation in 2005), the total amount of out-of-pocket payments for health care amounted to 6.7% of total current health spending in 2005.[64] Even so, the reimbursement system as such tends to negatively affect low income groups, who, as they are unable to pre-pay the health care bill, might postpone necessary health appointments in order to avoid stigmatisation by the health insurance scheme.[65] Financial obstacles exist in particular for dental care, where liberalisation of price setting by dentists results in high out-of-pocket contributions by households of up to 43% (in 2005).[66]

The financial situation of the health insurance system is far from being stable. Today, the system is heavily confronted with the fact that insurance revenues, similar to the pension fund, are strongly associated with GDP and the employment level, which are both in a state of collapse since October 2008.[67] The rising unemployment not only reduces the number of affiliates, but in particular the number of cross-border workers, who for reasons of age structure and a preference to use their own and mostly cheaper systems of care, are less costly. Estimates show that equal spending by non-residents would result in the total health expenditure to be 15% higher.[68] Such impacts need to be taken into account for further forecasts. To date, the health insurance scheme has little discretion to influence the volume of services. Fee-for-service is still the predominant payment system for medical services, also applied in hospitals for doctors' remuneration, independent of the hospitals' budget-based payment.

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60 Source: IGSS 2008, 32, www.statsecu.etat.lu: Population protégée (moyenne annuelle) [RG/PP/IGSS, 2007], Assurés frontaliers actifs et volontaires: répartition par groupes d'âge (moyenne annuelle) [RG/PP/IGSS, 2007]).

61 www.statsecu.etat.lu .

62 www.statsecu.etat.lu: Total des contributions de l'Etat aux recettes courantes de l'assurance maladie-maternité [RG/AM/IGSS, 2007].

63 www.cmcm.lu.

64 OECD 2008. This figure only refers to the part of the health care bills not reimbursed by health insurance, and does not include over-the-counter payments for non-refundable drugs and health commodities and private expenditure for long-term care.

65 TNS-Ilres 2009, C.N.E. 2007, 63-90. The offered fast-track reimbursement or pre-payment cannot fully relativise the stigmatisation problem.

66 OECD 2008, 12.

67 Feist, 16 January 2009.

68 OECD 2008, 108.

Alarming are in particular figures showing 3.4% higher health care spending growth versus real GDP growth in the favourable period between 1995 and 2005 and almost 6% annually in real terms.[69] This might partly be explained by the annual 3% increase in the population covered during the same period, of which 0.6% were pensioners, and partly by important investments in the modernisation of health care infrastructure and health technology during this period.[70] Expenses for investments in hospital infrastructure are largely financed through the State's hospital investment fund (80%), governed by the Ministry of Health, and only require 20% of co-funding on behalf of the health insurance scheme. With some delays however, the latter gets threatened with substantial charges of all running and maintenance cost of new infrastructure. Unfortunately, such long-term costs are not or insufficiently subject to cost efficiency analyses prior to investment decisions.

The share of cross-border health services is becoming more and more important.[71] In 2007, the expenses for foreign health care services amounted to nearly 17% of the total health insurance expenditure. They even rose by 18% in relation to the year 2006.[72] This peak not only reflects the significant number of cross-border workers among the insured population, it also confirms that Luxembourg has fully implemented the ECJ rulings on Regulation 1408/71 EEC. Today, only 1% of the required pre-authorisations for cross-border health care are refused by the CNS.[73]

Uniform social security status

As of 1 January 2009 and caused by the implementation of the uniform social security status for all private sector employees, five of the former health insurance funds merged into the national health insurance fund (Caisse Nationale de Santé, CNS). The reform brings equal rights for the previously identified groups of manual workers and other employees under labour and social legislation and, thus, results in far-reaching structural changes to the social security system. [74] As a result, social security contributions and benefits were harmonised; this is of particular importance for continued payment of wages during short-term sickness leave. Also, the two groups' respective funds (sickness, pension), their representative chambers and social tribunals merged. It equally affected the composition of the corporatist bodies.[75] Furthermore, the new "Social Security Code" legislation replaced the former "Social Insurance Code". Only civil servants kept their separate social security system.

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69 OECD 2008, 98 and 108.

70 Marx, 3 March 2009, reported an investment volume of EUR 700 million in the years 1998-2008 and prospects of another EUR 500 million for the next 10 years.

71 As the geographical and financial centre of a the so-called Greater Region, a synthetic area composed of the Grand Duchy of Luxembourg and surrounding regions of Lorraine in France, Saarland and Rhineland-Palatinate in Germany and the Belgian Provinces of Luxembourg and the Belgian German-speaking areas, its international importance should not be underestimated. 11 million inhabitants live in this "Greater Region", but the mobility of employees and consumers is nowhere near as high as in the direct surroundings of Luxembourg. Luxembourg accounts for 150,000 cross-border workers, who reside in one of the neighbouring countries. It includes a substantial number of doctors, nurses and other professionals employed in the domestic health sector. The rapidly increasing mobility of citizens makes the cross-border situation with regard to health and social security relatively complex.

72 IGSS 2008, 89.

73 Source: CNS.

74 European Commission, note 485/08. Following a 2006 agreement between the Luxembourg government and social partners, the new arrangement entered into force on 1 January 2009 by means of the Act of 13 May 2008.

75 The results of the social elections in November 2008 determined the composition of trade union representatives in the chamber of employees and all professional chambers for the next 5 years.

With regard to benefits, the uniform status will have a particular impact on the continued payment of wages during sickness leave. In such an event, the employer will now continue to pay wages for up to 13 weeks per 12-month period. The associated excessive financial burden for employers with respect to manual workers has been buffered by some transitional provisions and the creation of a new employer's mutual insurance fund to cover the risk of the their sick pay obligations.[76]

As a transitional provision for a period of three years, manual workers are compelled to carry on paying higher social security contributions than employees, which were formerly justified by the health insurance's obligation for continued wage payment. The employers will be compensated by this residual. However, the workers' supplementary contribution will be gradually reduced until, by 2012, an equal contributions level of 12.35% applies for all employees, to be borne in equal shares by employers and employees.

The contributions for the new employer' mutual insurance fund have to be borne only by the employer. Its rate is set at four different levels (0.35 to 2.29% of accumulated gross wages) depending on the volume of insured risk and the sickness rate of the covered employees. Membership is, in general, mandatory. The self-employed can affiliate on a voluntary basis. Since checks of work incapacity were strengthened in parallel for both employers and the Social Security Medical Inspectorate, it will be interesting to monitor the impact on future work absenteeism. [77]

With regard to health, the new uniform status has not brought across any substantial changes to the health care system, but benefits in cash (i.e. sickness pay) have been affected to a much larger extent. Overall, it contributed to greater efficiency and enhanced management capacity of social security and, in particular, benefited companies, which are no longer obliged to separately manage the two categories of employees. However, it also challenges the new health fund by an enormous administrative reorganisation.[78]

Health Care Services

The system offers health services at all levels but is, however, strongly orientated towards hospital care. In 2007, 51% of the expenses of health insurance were spent on hospitals, which due to some accounting rules do not include the doctors' fees in hospital. If these costs were added to the hospital expenses, the share of hospital expenses would rise even more.[79]

According to the hospital law of 28 August 1998 and the latest national hospital plan of 13 March 2009, the sector is divided into three geographical areas and counts for 2,312 acute beds[80] in five general hospitals and six specialised institutions(in part centres of excellence). Due to the lack of strong coordination between out-patient health services, hospital, rehabilitation and nursing home centres as well as preventive health services, the planning of health care services remains fragmented and faces difficulties in anticipating service requirements on local, regional and national levels with respect to future trends such as ambulatory surgery or demographic changes in society. [81] The pharmaceutical sector is regulated in a similar way to the hospital sector. The number of pharmacies is limited to 1 per 5,000 inhabitants.[82]

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[76] MS/MSS 3/2008, 3-6.
[77] http://www.mss.public.lu/actualites/2008/12/art_comm_press_statut_unique1/index.html.
[78] MS/MSS, 1/2009, 8-9
[79] IGSS 2008, 84.
[80] It represents 4.8 beds per 1,000 inhabitants on 1January 2008. Sources: Règlement grand-ducal du 13 mars 2009 – Plan Hospitalier, www.statsecu.lu , Eurostat.
[81] Feist, 16 January 2009.
[82] Consbruck 2009, 10.

With the exception of one hospital (Centre Hospitalier de Luxembourg), all hospital doctors work as self-employed attending doctors and are remunerated separately from the hospital according to the tariffs stipulated in the nomenclature for medical acts. The latest tariffs mark-up (lettre-clé) came into force on 1 March 2009. In 2007, the average annual gross income (after deduction of expenses) of general practitioners is reported at EUR 122,106 p.a. and that of specialists at EUR 244,834, with neurosurgeons, radiologists, cardiologists and anaesthetists at the top.[83] The system does not foresee any rental charges from doctors for using the hospital equipment or support staff.

All health care providers must be approved by the Ministry of Health. Authorisation is given according to the appropriate level of medical and language competence, controlled by the Medical College. The authorisation is linked to a convention with the CNS stipulating the remuneration fees for treatment for CNS patients.[84] The convention is associated with the absolute freedom of each doctor to decide on whatever treatment he considers necessary without any obligation concerning its economic impact. This freedom was long unimpeachable, and has only recently been cautiously called into question.[85] In the period from 1998 to 2005, the number of doctors rose by 20% and number of operations by 33%. The population, in contrast, only grew by 9% over the same period.[86]

Since December 2008 a new medical service structure, the so-called medical homes (maisons médicales) has come into force. On-call general practitioners provide services when general surgeries are closed, from late evening, during night and on weekends. Three fully-fledged medical homes next to a hospital in the north, the centre and the south of the country now replace the former rotation system of stand-by-practices. With this concept, overloading of the emergency services with minor illnesses is equally expected to be remedied.[87] As in exceptional cases the medical home staff on duty (2-3 doctors per home) also provide home-visits, it is questionable whether such services correspond to the limited staff capacity of these medical homes or will reduce its economic value as more doctors need then to be employed.[88]

Prevention

The Economic and Social Council (ESC) argues in its 2009 report that the Luxembourg health care system has largely concentrated on cure for a long time and proposes to change that focus. Most chronic diseases, including cancer, heart disease and diabetes are largely preventable, and can in theory be avoided if people take more responsibility for their own lifestyles. As treatment is expensive, the Council encourages the strengthening of prevention as the more cost-effective route for the health care system. [89]

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83 IGSS 2008, 71, Feist, 20 March 2009.

84 Consbruck 2009, 4

85 The CES proposes to add a number of framework conditions to the convention to allow the health insurance fund some form of control over the number of practicing doctors, the quality in terms of minimum requirements for continuous training, medical documentation and the respect of the most economic medication, where scientific evidence for equal output against more expensive medication is given. CES 2009, 58-61.

86 Feist, 16 January 2009, CES 2009, 72.

87 MS/MSS 1/2009, 10.

88 CES 2009, 74. In January 2009, the second month of operation, the medical home in North Luxembourg lready reports one-third out of 1,000 contacts as being home-visits. MS/MSS 1/2009, 10.

89 CES 2009, 6 and 55.

In the past two years the number of prevention programmes has increased rapidly, with several programmes only starting from 2008.[90] Especially cancer detection programmes (mammography, colonoscopy, prostate examination) have run for longer and show positive results.[91]

Whereas the OECD criticises Luxembourg's comparably low spending on preventive care,[92] national actors and authorities suggest reading these OECD data very carefully. In the absence of a clear standard of what has to be recorded as preventive care, quite a number of effective preventive measure that are undertaken are statistically not defined as such: routine medical and dental examinations, colonoscopies, etc.[93] Following the OECD criticism, the IGSS started to re-analyse the expenses for preventive medicine.

eHealth

The Government launched a new strategic e-health plan in November 2008 as part of European action plan "i2010". The plan aims to make the health sector more dynamic in the exchange of medical data and coordinated action in investments in technology for Information and Communication Technology (ICT). It also foresees the introduction of an electronic health card.[94]

Further examples for research projects in the frame of health information technology are (www.santec.lu):[95]

- CARA, the national medical imaging record project, aims at building up an electronic registry of imaging methods and techniques in order to allow electronic access to existing images and thus avoid unnecessary duplication of examination. At the end it will lead to both a more economic use of recourses and a reduced exposure to radiation for patients. The project started in December 2008 for a period of 2 years.
- Healthnet – A secure computerised data communication network for health professionals and health care institutions has been set up in 2005 and is regularly improved. The network is used in particular for the exchange of lab tests and medical imaging.
- ISIS – The abbreviation stands for an inventory of the different software systems used by the 6 hospitals and 3 specialised national health centres (heart, radiotherapy, rehabilitation). The study was conducted between 2006 and 2008 and aimed at identifying potential interoperability between the various systems in place.

Health Information

In April 2009, the Health Portal (www.sante.lu), already announced since 2006, finally went online. It intends to promote healthy living and preventive actions, and provide better orientation in the health sector. Developed by the Government institution e-Luxembourg and the research centre CRP-Santé, the Health Portal brings together all the information about health on one website for both, citizens and professionals. It provides information for

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[90] Detection of congenital anomalies, withdrawal of tobacco dependency, vaccination against human papilloma virus, a prevention centre for back exercises, promotion of healthy nutrition and physical activity - MS 2009, MS/MSS 2008

[91] MS 2009, 35-43.

[92] OECD 2008, 124.

[93] CES 2009, 56.

[94] MS/MSS 3/2008. 11-13.

[95] www.santec.lu.

prevention, background information and fact sheets on diseases, and the payment rules and procedures of care consumption. Furthermore, an overview of all actors of the Luxembourg health care system, relevant legal provisions as well as publications and main events can be found. At the end of the year 2009, a directory of all health services in Luxembourg will be added.[96]

The media are completed by the online-newsletter "Insight SantéSécu" of the Ministries of Health and Social Security, which since 2006 has issued information 3-4 times a year about latest developments in the sector. It is distributed to the main health actors and interested subscribers, but also available on the website of both ministries.

Coordination

As the main coordinating mechanism, the quadripartite committee, composed of representatives of employer associations, trade unions, the health care providers and the Ministries of Health, Social Security and Finances, carries out a bi-annual review of the efficiency of the measures in place with regard to the quality of performance of the health care system and the financial balance of the health insurance scheme. If necessary, new directions can be proposed. By virtue of its composition, the quadripartite committee allows a well-balanced assessment of the topics analysed. In the same light, it clearly limits its decision-making power, as the parties can barely reach consensus among themselves in favour of strong reforms; neither have strong voting rules been established, nor do its recommendations have binding effect. It mainly fosters the Government's accountability for the measures taken.

In the last five years, a joint steering committee kept the reform debate among the government organisations ongoing. In the light of upcoming parliamentary elections in June 2009, the group is now about to prepare strategies for the next legislative term.

2.2.2 Overview of impact assessment

Appropriate cost containment measures combined with quality improvement of health care services represent the overarching goals of the Luxembourg health policy. Recent assessment activities also favour these issues.

Cost-containment

The approach on cost-containment is very much focussed on improved and reliable information for policy development and decision-making. In the light of the upcoming elections, with regard to the future of the health care system many stakeholders favour substantial investments in various impact studies. Major endeavours of the previous years are as follows:

[96] www.sante.lu.

Study or political action	Impact on the system
Hospital logistics: As the centralisation of hospital purchasing is only organised on a voluntary basis and coordinated by a working group of the hospital association EHL, the Government tried to identify in concerted action with the hospitals the most suitable areas to be logistically centralised. Central purchasing, hospital pharmacies, laboratory, sterilisation and informatics (see ISIS study above) were in the focus of interest. [97]	**limited** Neither has the mentioned inventory of hospital informatics led to conclusions about future investment strategies in information technology, nor could an agreement on a joint cost-efficiency study for a national logistics centre be found. Hospital logistics is now subject to bilateral collaboration and continuous analysis by the EHL of the market for drugs and medical products.
Savings on hospital drugs: The Schellen & Partner study on hospital drug consumption came to the conclusion that savings of EUR 5.1 million could be made without any loss of quality.[98]	**none** In order to ease the implementation, CNS based its approach on a more conservative calculation resulting in measure to save EUR 1.5 million. The measure failed based on opposing positions by hospitals.
Reforming the payment system through the implementation of DRGs and other performance based payment measures: The authors of the OECD 2008 assessment on Luxembourg favour the development of the DRG system and a performance based payment based on clinical pathways.[99] A flat-rate payment approach was also analysed in a study undertaken by PricewaterhouseCoopers at the end of 2007 to modify the system of variable hospital costs. [100]	**limited** The OECD study does not pay enough attention to the given limits of available medical documentation of diagnosis and procedures. As the PWC study excludes from the outset the bulk of costs for doctors and nursing service, the application will only have marginal effects.
Improved hospital management: Various proposals were made to make hospital managers and doctors more accountable for their outcome and budget decisions,[101] which the Government saw to be remedied by the creation of a new position known as "coordinating doctor".	**limited** In 2009, an agreement has been settled between the Medical Association (AMMD) and Hospital Association (EHL) on the mission and the role of a coordinating doctor. However, the agreement foresees a primarily consultative function and explicitly excludes any hierarchical implication or decision-making power of such a person, which barely corresponds with the initial intention.[102]

[97] MS/MSS 1/2008, 13-16.
[98] MS/MSS 2/2007.
[99] OECD 2008.
[100] Unpublished study on options for variable costs in hospitals. Source of information: IGSS.
[101] OECD 2008, 126.
[102] Source: Ministère de la Santé.

Promotion of generic drugs and reduction of prescription of antibiotics: Since 2004, the Ministries of Health and Social Security in collaboration with the health fund have run several campaigns to sensitise the population and medical community about the similarities of branded and generic drugs and the economic gain of the latter. Furthermore, the Scientific Council prepared reference guidelines to promote good practice in relation to choice of antibiotics and dosages (www.conseil-scientifique.lu).	**limited** The efforts undertaken do not show the success they could have. At least regularly updated information by CNS about comparable branded and generic drugs puts pressure on the pharmaceutical companies to reduce the branded drug price.[103] However, pharmacists remain unauthorised to substitute prescribed drugs with similar agents. The impact analyses of the guidelines for the prescription of antibiotics have shown that they have positively influenced the prescription pattern of paediatricians and internists, whereas most of the GPs have not respected them. In 2007, the number of prescribed antibiotics rose again by 7.5%.[104]
Control of work incapacity: In 2007, regular checks of medical profiles concerning the prescription behaviour of work incapacity certificates were established to scrutinise those cases where the annual volume of such certificates exceeds more than two-thirds of the average number of certificates per year.[105]	**limited** Neither preliminary results nor information on further action has become public since.
Limiting the number of lab tests: In 2005, the Government tried to limit the high volume of medical lab tests, which was partly simply caused by the overcapacity of the sector. As negotiations on a flat-rate reimbursement failed, the number of chargeable tests per prescription was set at 12 for private laboratories.	**acceptable** In 2007, the administrative court declared the limit discriminatory as long as it does not equally apply to hospitals. This consequence has again triggered the discussion on flat-rate payment, level of tariffs and the establishment of a central database. In December 2008, the Ministry of Social Security reduced the tariffs for lab tests by 20%. The dispute is ongoing.[106]

103 (http://www.cns.lu/prestataires/?m=13-0&p=65).
104 MS/MSS 3/2008, 14-15.
105 MS/MSS 2/2007.
106 Feist, 6 March 2009.

Cost-efficiency analyses: The OECD required political and remuneration decisions to be based much more on cost-efficiency analyses and international benchmarks. It mentioned in particular the Commission for Nomenclature and the introduction of a gate-keeper system as well as a partial replacement of the fee-for-service payment by capitation. [107]	**indifferent** The recommendations have recently been taken up by the 2009 report of the Economic and Social Committee.[108]

Quality of health care

Luxembourg is aware of the necessity to constantly assure and improve the quality of services and procedures. The following overview presents a now exhaustive list on recent measures and studies:

- The Scientific Council, created in 2005, developed for five selected areas[109] treatment guidelines based on international scientific standards of evidence-based medicine, but excludes economic evaluation.[110] As from 2009, the Luxembourg Association for continuous training for physicians (ALFORMEC) will explicitly integrate the recommendations in its syllabus.[111]
- The Centre of Health Care Studies of the research centre CRP-Santé is undertaking several surveys concerning the impact of certain diseases and medical disorders on the country's socio-economic situation. Current and most recent projects encompass cardiovascular risk factors of the population, headache (as part of Eurolight), health behaviour in school-age children, obesity and excess weight in children, and impact of stroke on quality of life and family)[112]
- Since 2003, EFQM is used as the standard measure for quality assurance in hospitals[113] and is being promoted through a financial incentive to upgrade the overall hospital budget by an additional 2%. In 2008, a survey of hospital patients' satisfaction was commissioned to the Swiss Picker Institute, the findings of which are to be published in the second trimester of 2009. For the future, participation in the WHO PATH quality project (Performance Assessment Tool for Quality improvement in hospitals) has been announced.[114]
- Health Consumer Powerhouse, a Swedish registered institution providing various health consumer indices, ranked Luxembourg in first place on its heart index 2008, evaluating patient information, prevention, medical procedures and the results in the

[107] OECD 2008, 108.
[108] CES 2009, 61-63.
[109] Treatment with antibiotics, laboratory analyses, vascular disorders, oncology, prescription of medical imaging.
[110] Although bound to standard operating procedures comparable to those used for Health Technology Assessment, the Scientific Council has neither implemented a standardised reporting structure nor established any formal link to the HTA society. The impact evaluation is not yet formalised.
[111] Source: Conseil Scientifique.
[112] www.crp-sante.lu.
[113] OECD 2008, 115.
[114] MS 2009, 68-73.

respective area in 29 European countries (EU Member States, Switzerland and Norway).[115]

- In 2009, the IGSS launched a pilot project on quality assurance of hip and knee endoprostheses using administrative data. Based on a scientific approach developed in Germany by the AOK/Feiser/Helios[116], the study analyses the administrative records of CNS. Preliminary results are announced for autumn 2009.[117]

2.2.3 Critical assessment of reforms, discussions and research carried out:

Since 2004, a government action programme called "Medicate better through better spending" *("Soigner mieux en dépensant mieux")* guides the endeavours of improving the quality of health care through increased spending efficiency. During this period, considerable work has been accomplished through concerted action to enhance exchange among health actors, increase awareness of the financial challenges and to create synergies. It led to a concentration of resources, such as the merger of hospitals or the creation of the uniform social security status in 2009, which brought about the amalgamation of five health insurance funds into a single health fund (CNS). The latter does, in particular, strengthen the management and steering of the health insurance.

During this period, Luxembourg has also enormously strengthened its internal and external communication profile. Through recent important improvements to communications and publications, such as the recently launched Health Portal (www.sante.lu), the quarterly online newsletter "Insight SantéSécu", and the online publication on social security statistics (www.statsecu.etat.lu), Luxembourg has made its health system more transparent and information better accessible for both health actors and the general public.

In previous years, health spending has increased by an average of 6% per year and even passed the rate of GDP growth.[118] This was partly caused by an increase in the number of benefits, a shift to more specialised and expensive care, but also by a significant extension of health services and a substantial increase of the level of income of providers. These notwithstanding, the financial situation of the health insurance could so far be kept in balance. However, the challenges of the financial crisis and the inexorable ageing of the population lie ahead and the health insurance system needs to be strengthened to deal with these structural risks of the health system more effectively.[119]

Another major drawback concerns the poor quality of medical data. Instead of applying the ICD-10 code in its full shape, Luxembourg make only use of three digits, does not connect the information of the discharge diagnosis to the payment of doctors and hospitals, and in its national nomenclature of medical procedures, uses a code of considerably low granularity by international standards. In consequence, the low quality of data jeopardises the systems' statistical analysis. The non-transparency also negatively affects solid health planning, the negotiation of fair tariffs and any combat of fraud and abuse. This puts Luxembourg at risk of becoming internationally isolated. The available data do not meet the standards required for health performance and outcome measures and comparisons.[120]

[115] Health Consumer Powerhouse 2008, MS/MSS 2/2008).
[116] http://wido.de/qsr-bericht.html.
[117] Source: IGSS.
[118] OECD 2008,98.
[119] CES 2009, 64.
[120] Marx, 5 March 2009.

Despite a veritable governmental effort in health prevention, it is not only the ESC who criticises the lack of a comprehensive view of all the many efforts undertaken by different Ministries, organisations and counselling centres.[121] Preventive health care seems neither centrally coordinated nor reported or budgeted in a concise manner. Apart from the presentation of the major programmes (www.sante.lu), little is known about the policy cycle for preventive health measures, the programmes' preparation and budgeting, or the (cross-) responsibilities of various actors for implementation, impact and cost-benefit analyses.

The new hospital plan, despite the recognition of an emerging trend toward ambulatory surgery and day care (Art. 18), largely perpetuates the status quo with a slight increase in the number of beds for some specialised centres of competence for cardiology and geriatrics. The plan neither prepares for a major reorganisation of the sector with respect to ambulatory surgery or integrated care services, nor contains provisions for mandatory cooperation in certain areas, such as information technology, purchase and logistics, nor makes doctors or hospitals accountable for a prudent use of public resources.[122] However, one new chapter takes into consideration new measures of enhanced quality management and patient safety.[123]

Furthermore, the health care services in Luxembourg seem inappropriately prepared to meet the challenge of globalisation of health care and a greater mobility of patients. Due to its opacity in terms of supply and quality of care, caused by a low level of medical documentation standards, detailed and expressive information is difficult to obtain from outside the country. High labour costs further challenge the attractiveness for foreigners.

With regard to an increased influx of foreign doctors, the ideas of potential limitation of the number of doctors or abandoning the mandatory convention for doctors came on the political agenda.[124] The latter would on the one hand risk introducing a two-tier medical sector and eroding the fundamental element of solidarity to the detriment of the poorer layers of the population, while on the other hand, stronger competition among providers for the better-off and profitable and high-tech service could weaken the system's balance in terms of geography and fields of medical specialisation.[125] However, in its ruling on Hartlauer (C169/07), the European Court of Justice has made its position on limiting the right of establishment very clear.[126]

Despite its exclusive position, the purchasing power of the public health insurance fund institution seems unexpectedly low. As a public body responsible for orchestrating health care consumption to maximise value for its members and society, much stronger requirements for medical justification of charged services and stricter control of providers to operate economically should be expected.

With regard to communication, the new Health Insurance Fund CNS in particular still has ample room to improve its communication and information channels for its members and health care providers. This has largely been acknowledged by the CNS management.[127] It is therefore surprising that Luxembourg just recently resigned from the submission of self-initiated international projects in the Greater Region, which in collaboration with health

[121] CES 2009,56.
[122] Feist, 16 January 2009, Plan hospitalier national. Memorial A-54 of 23 March 2009
[123] MS/MSS 3/2008, 10-11.
[124] Feist, 26 March 2009.
[125] CES 2009, 59.
[126] ECJ C 169/07 Hartlauer Handelsgesellschaft vs. Wiener Landesregierung [10 March 2009]. On 10 March 2009, ECJ ruled with regard to the freedom of establishment and services (Art. 43 and 48 EC) in health care that Articles 43 EC and 48 EC preclude national legislation under which authorisation is necessary for the setting up of a private health institution, and preclude refusal of such authorisation with a reason that there is no need for such institution, if group practices in this system are not bound to the same conditions.
[127] MS/MSS 3/2008, 6-8.

insurance funds in Germany, Belgium and France aimed at improved patients' access to health service and social security information by means of a social security call-centre network.[128] This project should have been co-financed by the European Regional Development Fund (ERDF).

The guaranteed universal access to a very large benefit package, in particular, has turned the health and nursing care industry into a prosperous and labour-intensive economic sector and, thus, contributes by and large to three of the four priority areas of the Lisbon Strategy. However, in the medium term, increasing demand for more developed and, hence, more costly health care services will also bring the system under financial pressure. The ESC is of the opinion that the State and the players must meet the balanced budget of health insurance, while maintaining a functioning health system.[129]

The overall steering of health insurance involving all stakeholders - government, social partners, National Health Fund, doctors, hospitals and other providers - is insufficient to meet the needs of change, especially against a backdrop of economic and financial constraints. The past has shown that it is almost impossible to gain hospitals' and clinicians' agreement for either a common conceptual orientation or an integrated organisational functioning. Therefore, it is imperative to optimise the management and coordination of the health system and to identify inherent efficiency gains and saving potentials.

2.3 Long-Term Care

2.3.1 Overview of the system's characteristics and reforms, debates, political discourse and scientific assessment

Ten years after the implementation of a long-term care insurance, this youngest pillar of the Luxembourg social security system still enjoys a high degree of acceptance among the population. In particular, its generous benefit package not only allows many people in need of assistance with their personal care to remain in their home environment, but equally puts the care of elderly on a secure footing and has created a prosperous economic sector and labour market for home and in-patient care. These strengths also have their costs, and after an affluent beginning the current account balance went into deficits from 2004.[130] A substantial increase of 40% in the individual contribution rate (from 1 to 1.4% of gross salary) as from 2007 has remedied the risk. However, expected demographic changes and the consequences of the current crisis require a more thorough re-evaluation of the whole setting. The current actuarial analysis of the long-term care insurance scheme by IGSS is an important step in this direction.

On 16 March 2009, the Grand-Duke finally signed the controversial bill on palliative medicine and euthanasia. The law is quite famous, but less for its content and the fact that Luxembourg is the third European country after Belgium and the Netherlands where euthanasia is no longer a punishable offence, nor for the entitlements of certain rights to palliative care, and more for the fact that the initial Grand Duke's veto in 2008 caused an amendment of the constitution to restrict his rights to just the signature of bills. It is too early for any predictions concerning the development of palliative services. So far, a debate is already under way concerning the extent to which the concept of palliative medicine corresponds with fee-for-service payment methods.[131]

[128] Source: Ministry of Social Security.
[129] CES 2009, 6.
[130] IGSS 2008, 191.
[131] Etienne, 9 March 2009.

Long-Term Care Insurance

As for health insurance, public long-term care insurance guarantees equal access to the whole working population including cross-border workers, irrespective of age and health status. The insurance is organised as a social insurance system which is mandatory for all persons insured under Luxembourg's health insurance scheme. It offers access to continuous insurance benefits from the first day of membership.[132]

The so-called "Cellule d'évaluation et d'orientation (CEO)" is the competent organisation for the assessment of dependency status and evaluation of long-term care needs under the responsibility of the Ministry of Social Security. Highly criticised for the very long processing delays, the organisation now manages to handle all applications within four months.[133]

The crucial criterion to become entitled to the benefits is proven dependency on assistance from a third person for the activities of daily living (ADL) for a minimum of 3.5 hours per week. Even below this threshold there is still a possibility of receiving means-tested financial assistance from the National Solidarity Fund to pay for the services.

Currently the nursing-care insurance scheme accounts for more than 10,000 beneficiaries receiving benefits in kind or cash benefits on a regular basis.[134] Benefits are usually offered in kind and carried out either by accredited nursing homes or ambulatory home care providers. It is also possible to receive only cash benefits or a combination of cash benefits and benefits in kind instead. However, the cash benefit part is always limited to 10.5 hours per week and requires that an informal carer is able to provide care instead of the professional organisation. The long-term care insurance scheme takes over the costs for counselling of the informal carer and also pays his/her pension fund contribution.[135]

In in-patient nursing homes or homes for the elderly, the price for accommodation has to be paid by the resident himself. Despite the remuneration of all services related directly to care provision by either the health insurance or the long-term care insurance, this accommodation price is considerably high. In 2005, it varied between monthly EUR 1,440 and EUR 2,896 for integrated centres for the elderly and between EUR 1,335 and EUR 3,120 for nursing homes.[136] For comparison, in 2003, 75% of the households of people over the age of 60 had at their disposal an amount equal or less than EUR 2,500 per month, and 30.4% had less than EUR 1,250.[137] The National Solidarity Fund provides mean-tested support of these costs (accueil gérontologique). In 2007, 643 people received on average EUR 799 per month.[138] The fact that these prices are not available in a comparable and transparent manner is more than appalling. It was in this light that the necessity for the study on care analysis and analytical accounting was born (see section on 'Impact assessment' below).

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132 Only people covered for long-term benefits by international organisations are excluded, and voluntary health insurance members are restricted for benefit entitlements to a one-year qualifying period.

133 MS/MSS 1/2009, 3-4.

134 www.statsecu.lu Evolution du nombre de bénéficiaires de prestations par âge et sexe à partir de 2001 [RG/A_D/IGSS, 2007].

135 A former financial provision to support the replacement of an informal carer by another person for a period of three weeks was suspended in 2007. The legislator reasoned its decisions with discrimination against beneficiaries of services in kind and the unjustified administrative complexity for the long-term insurance system. Today, it is the responsibility of the ambulatory care organisation to negotiate, in case of short-term bed requirement, both the temporary placement of the dependent person in a nursing home as well as its financial handling. Throughout such temporary inpatient periods, the ambulatory carer will continue to be remunerated.

136 Kerger 2008, 162.

137 Ibid.

138 IGSS 2008, 243-247.

Financing

The latest available figures on public and private long-term care expenditure [139] dates back to 2005, where it amounted to EUR 414 million and equalled 1.52% of GDP.[140] More recent information at national level only refers to public expenditure.[141] It amounted to EUR 399 million in 2005 (1.5% of GDP), EUR 402 million in 2006 (1.35%) and EUR 425 million in 2007 (1.34%).[142]

As mentioned above, the long-term care insurance scheme is confronted with enormous increases in expenditure. In the period between 2003 and 2006, the deficit amounted to between EUR 13.5 to 16.9 million.[143] During these three years, especially the expenditure for benefits in kind (representing roughly 70% of the total expenses) increased by 44%. The parallel increase of the number of beneficiaries (20%) [144] can only partly explain the phenomenon.

In order to ensure the financial viability of the long-term care insurance scheme and limit the burden of public expenditure, the law of 23 December 2005, of which several parameters were amended in 2007, addresses several features in order to ensure the financial equilibrium of the system. The most relevant are:

- The contribution rate for individuals has been raised to 1.4% payable without any upper limit on all earnings, including fringe benefits and capital.
- The substantial state contribution, previously 45% of total expenditure, was frozen at a nominal amount of EUR 140 million (level of 2006 spending)
- The upper financial reserve limit of 20% of total expenditure was set aside.

Long-Term Care Services

Market entry to the care-giving sector is restricted to organisations which are approved by the Ministry of Family Affairs based on the fulfilment of certain quality standards and after conclusion of a framework contract with the health insurance organisation.

The sector knows four types of service: in 2007, there were

- 17 ambulatory networks for home care with two dominating institutions (Stëftung Hëllef Doheem, Help),
- 40 day care institutions
- 35 intermittent care centres (for alternating short-term stays according to the actual level of dependence)

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[139] According to the joint questionnaire of Social Health Accounts (OECD – Eurostat - WHO HQ) as used in indicator HC-P13 (Total spending on long-term care as a percentage of GDP).

[140] Source: HC-P13, update July 2008.

[141] Public expenditure on long-term care includes: 1. Current expenditure of the long-term care insurance system and those costs for accommodation in nursing homes that are borne by the National Solidarity Fund (accueil gérontologique).

[142] IGSS 2008, 190 (Table 73) and www.statsecu.lu ,Etat détaillé des dépenses [RG/PM/IGSS, 2007], Fonds National de Solidarité, Comptes financiers Etat détaillé des dépenses, (en EUR). These figures are still preliminary, as due to often considerable delays in the settlement of accounts with the insurance fund, the final expenditure for Luxembourg is likely to increase substantially even two years after the reporting period.

[143] MSS 2009, 44.

[144] IGSS 2008, 190, Table 75 and 146, Table 10.

- 51 nursing homes and integrated homes for the elderly with a capacity of 4,805 beds in 2005.[145]

The latter roughly employs 65% of the sector's workforce. The providers are remunerated by the long-term care insurance scheme according to a sector-specific fee per hour (valeur monétaire). [146] For 2008, the long-term care insurance and COPAS, the representative association for nursing homes and integrated homes for the elderly, could not agree on the hourly fee. Similar fees for both types of institutions were no longer seen as appropriate. Finally, an arbitrator proposed a value of EUR 42.52 and strongly recommended to the committees for quality in long-care care and for standardisation to progress in the development of results in order to facilitate future negotiation. He, furthermore, suggested to the providers that instead of two different sector-specific collective contracts for hospital and nursing home staff, to orientate contracts fully toward the latter.[147]

Integrating Out- and In-Patient Care services

The biggest network of home care services, "Hëllef Doheem", has developed and is implementing a number of innovative approaches in order to better link acute and long-term care periods:

- As an ambulatory care provider, it also runs offices in hospitals to improve the coordination between in- and out-patient care-giving ("infirmier de liaison"). The services are usually paid for by additional resources, such as donations. Apart from the quality objectives, the concept further gains competitive advantages in acquiring the hospital's patients as new long-term care clients. Therefore, it is little surprising that the competitors have followed this example.
- A second pilot application concerns the so-called "reference nurse", a concept of care coordination and management by a specific carer. The reference nurse supervises the care plan for a number of familiar patients and coordinates with the individual health and care networks of this person (doctors, social assistants, relatives). The concept is reported to be quite successful.[148]
- The third project, "Night watch", started in March 2009 and aims at developing and scientifically evaluating the concept, demand and costs of professional night watch services, for which demand in 2007 was initially estimated at 350 persons. The CRP-Santé is providing scientific backup to the project.[149]

2.3.2 Impact assessment

Quality

Luxembourg has taken action to improve the quality and transparency of long-term care. A quality committee for long-term care was established in 2007, composed of government delegates, representatives of the providers and the Luxembourg patient organisation "Patiente Vertriedung asbl". The CEO, equally responsible for assessing the dependent status of a person, monitors the standards set and measures misbalances between the care provided and the needs of the dependent person.

[145] Kerger 2008, 151.
[146] IGSS 2008, 137-140.
[147] MSS 2009, 39.
[148] MS/MSS 1/2009, 6.
[149] MSS 2009, 45.

In 2006, patients' satisfaction in the area of home care was measured for the first time through a survey conducted by the institute CEPS/INSTEAD.[150] Its results gave grounds for some new reform measures to be implemented from 2008, such as accelerated administrative procedures, minimum requirements for keeping patient records, as well as ensuring that information on how an application has to be completed will now be provided in 4 languages (Luxembourgish, French, German and Portuguese). In 2009, an evaluation survey on the satisfaction of dependent people living in health care and long-stay institutions will follow. The research centre CRP-Santé has been entrusted to conduct the study in close collaboration with the CEO.[151]

Just recently, the CEO also accomplished its work on an inventory of the providers' application of quality measures, special monitoring tools, as well as the resources invested in quality. The synopsis of the providers' culture of quality was presented to all providers on 27 April 2009, but is not yet subject to publication.[152]

Analytical Accounting

Caused by a controversial debate between providers and third-party payers about the source of financing for domestic services in nursing homes[153] and with the aims of bringing more transparency to the pricing of services and enhancing their planning, the Ministries of Social Security and Family Affairs commissioned a pilot study to analyse service performance in nursing homes in order to redevelop the concept of cost accounting. Based on an exhaustive recording in nine nursing homes, all services rendered were grouped according to paying authorities, which in some cases of non-obvious assignments could only be done with the help of allocation keys. The study, conducted by PriceWaterhouseCoopers with support from the University of Jena, resulted in an analytical accounting system that is currently undergoing further practical testing before it will become binding for all 51 nursing homes on 1 January 2010.[154] The analytical accounting system is expected to establish the right instrument for greater transparency and better national and in-house planning of long-term care services.

Cost Analysis

The law of 23 December 2005 also stipulated the execution of an in-depth projection of the financial situation of long-term insurance, which IGSS is about to undertake. Results are expected in summer 2009. The current favourable demographic situation, as described under the section on health care, equally applies to long-term care. The same holds true for the inevitable sharp rise in older people in the long run.

2.3.3 Critical assessment of reforms, discussion and research carried out

Since its implementation in 1999, long-term care insurance has led to a substantial change of the market for long-term care provision. Expenditure by the long-term care insurance system is rising primarily because of the growing number of beneficiaries and the constantly expanding range of care and services. The capacity of specialised nursing care homes has admittedly improved access to the system, but on the other hand, has also weakened the originally good financial situation of the long-term care insurance scheme.

[150] Kerger 2008, 203-230.
[151] www.crp-sante.lu.
[152] MSS 2009, 40. Source: CEO.
[153] Feist 21 September 2007.
[154] MS/MSS 1/2009, 5, MSS 2009, 39, Art. 40 of the law of 23 December 2008.

Therefore, the Government's impetus to foster quality improvements, enhance standardisation, strengthen technical progress and master system inefficiencies can only be acknowledged. Especially those projects which aim at bringing transparency and performance standards to the system seem to appropriately serve the political requirements for better steering of the sector.

The actuarial study of IGSS will shed light on how much pressure, caused by the ageing of society coupled with the consequences of the financial and economic crisis, the system will be able to withstand and for how long.

As the long-term care insurance system is a true blessing for elderly and dependent people as well as for large number of care provider, it can only be hoped that it can keep up its momentum, increase the service quality and stabilise its financial basis. Even though the nursing care services are quite domestically orientated, any research and actions taken that bring and keep Luxembourg's nursing care services at an international top level of quality and cost-efficiency should be welcomed.

3 Impact of the Financial and Economic Crisis on Social Protection

Since the occurrence of the financial and economic crisis in mid-September 2008, several national committees have been entrusted to monitor all or particular aspects related to the crisis and develop strategies in order to cope with them, predominantly in the mid and long term. With regard to social protection, three of these committees need to be mentioned, of which two were specifically established in November 2008.

1) The Economic Situation Committee[155]

This committee, established since 1995, composed of representatives of the Government as well as employee and employer associations, meets once a month to supervise the overall economy and the labour market in particular. The state of the job market in particular has become the most important instrument to monitor the impact of the crisis.

2) The Economic and Social Council:

The council is an advisory body to the Government and the Chamber of Deputies. It regularly assesses the economic, social and financial situation. Composed of 39 member, of which each of the social partners provide 18 and the Government three, it major role is to reconcile the positions of the two main forces of the economy by taking into account the public interest. The 2009 report, published on 3 April 2009, is mainly devoted to the analysis of the current crisis.[156]

3) Inter-ministerial workgroup on monitoring the social impact of the crisis

Following the ministerial meeting of Marseilles in October 2008, this inter-ministerial working group composed of representatives of the Ministry of Family and Integration and the

[155] Since 1975, this committee has been entrusted with the supervision of the overall economy and the situation of the job market in particular. It is also charged with the evaluation of short-time work and adjustments to retirement provision. The committee meets at least once a month and is composed of representatives of various ministries and administrations as well as employee and employer organisations and chaired by one of the ministers of Economic Affairs, Finance or Labour and Employment. The committee, which can authorise the government to take necessary measures aiming to prevent redundancies in the economy and to maintain employment, has become the most important instrument to monitor the immediate impact of the crisis.

[156] CES 2009.

Ministry of Social Affairs has been established in order to provide relevant information on national indicators related to labour market trends, benefit take-up ratios, housing, over-indebtedness and financial exclusion. First results of the working group have only been announced for the middle of the year.

4) Chamber of Deputies' special commission on the economic and financial crisis

Based on a parliamentary resolution of 18 November, the special commission of the Chamber of Deputies was established in December 2008, composed of 11 members of parliament. The commission met with various representatives of central and local government, the financial, service, industrial and construction sectors, employer associations and trade unions as well as international organisations. A number of meetings were specifically devoted to the impact of the crisis on labour and social security. A report was published on 27 March 2009.[157]

Trends and recommendations

In February 2009, the Economic Situation Committee analysed the new labour market statistics, which show a tremendous increase in unemployment up to a rate of 5.5% (January 2009)[158]:

- 30% of job seekers registered with the employment agency ADEM between September 2008 and March 2009, with an increase of 11.2% (1,287 people) between December and January alone.
- An additional increase in part-time unemployment due to short-time work (in total 9,210 employees affected).

Currently, the industrial sector is worst affected. Other sectors continue to show positive results, such as crafts, retail and the financial sector. For the latter, the special commission expects trend reversals in the near future in the light of an upcoming restructuring of the financial market.[159]

The statistics must be read carefully with respect to cross-border workers. Those who lost their job in Luxembourg will not show up in Luxembourg's unemployment statistics, but instead receive unemployment benefits in their country of residence based on the Directive Dir 1408/72 EEC. Thus, due to the state of Luxembourg's economy, the rising unemployment mentioned above is likely to be much higher.

The financial model of the public pensions system, organised as a pay-as-you-go system (PAYG) paid from current contributions with general financial participation from the Government of one-third of the individual pension contribution, has built a very solid financial basis. Thanks to the continuous economic growth over years, combined with the influx of cross-border workers in recent decades, the pension system could accumulate a large reserve of 3.5 times yearly expenditure, which currently equals 25% of GDP.[160] Furthermore, cautious investment rules only permit less than 2% of investments in shares.[161] This favourable overall situation makes the system likely to withstand the economic crisis for at least another 1.5 decades and thus no short-term measures are required.

Some of the supplementary and private pension regimes, organised either as defined benefit (DB) or defined contribution scheme (DC), face significantly more difficulties due to the

157 Chambre des Députés 2009.
158 ADEM 3/2009.
159 Chambre des Députés 2009, p. 38.
160 IGSS 2008, 212.
161 MS/MSS 3/2008, 8-9.

more liberal investment rules. In the absence of detailed information, individual investment losses of up to 40% can only be derived from anecdotal evidence. In fact, Article 6.1 of the law of 9 June 1999 on supplementary pension plans allows companies in the case of general economic and financial crises to adjust or repeal the scheme even to the detriment of the beneficiaries.[162] A number of companies operating such a plan are seriously considering this option.[163]

Irrespective of the financial crisis, the public pension system will be challenged anyway in the course of the next decade, due to the change of demographic pattern and its generous pension benefits. Today's beneficial high percentage of relatively young workers will in consequence lead to a growing number of pensioners in the future. Thus, the redistribution principle of the system requires a continuous and sustainable economical and employment growth in order to ensure its long-term viability. Current 40-year forecasts still based on assumptions of stable 2% growth in both productivity and inflow of labour, already predict a gradual deterioration in financial stability from 2020 onwards.[164] Logically, the structural slowdown in employment growth caused by the crisis will result in an additional shortage of financial resources. This new burden for the pension system will also affect the financing of health and nursing care, which all depend on additional public co-funding.

The assessment of the Economic and Social Council addresses the health care system in particular. It acknowledges on the one hand the outstanding quality of the services, but on the other it reminds about costs tending to get out of control. It favours investments in prevention and maintenance and has no clear opinion, whether or not a two-tier medical system does more harm or more good to the country.[165]

A major reflection on the long-term financing of the social security system is among the recommendation drawn from the analysis of the economic and financial crisis by both the Economic and Social Council and the special Chamber of Deputies' commission.[166]

Recently, in the context of the national pension working group, the IGSS has developed a number of scenarios to stimulate such reflection. They apparently make less optimistic assumptions with regard to economic growth and influx of foreign workers. Based on the current social security paradigm, the scenarios elaborate on options for increasing contribution periods and rates, reductions in replacement rates and modifications of the adjustments of pensions to the development of wages.[167]

In conclusion, it can be said that despite the economic and financial crisis, Luxembourg's pension system is still in a favourable demographic and financial situation that allows preparation for an effective reform without jeopardising the fundamental structure of the system or being compelled to introduce sharp cuts in benefits. The flexibility of the system gives ample room for a variety of measures and the substantial reserve makes it possible to prepare for a sound reform concept with all parties concerned. However, in order to keep the adjustments truly moderate, it needs to be implemented before the next phase of the pension policy cycle (2012-2019). Here, the crisis might give the opportunity for a consensus on necessary readjustment in order to keep up with this schedule.

[162] Law of 8 June 1999 on supplementary pension plans (Social Security Law).
[163] Information by IGSS.
[164] IGSS 2005.
[165] CES 2009.
[166] Chamber of Deputies 2009, p.41 -44.
[167] IGSS 2009.

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4 Abstracts of Relevant Publications on Social Protection

[R] Pensions
- [R1] General trends: demographic and financial forecasts
- [R2] General organisation: pillars, financing, calculation methods or pension formula
- [R3] Retirement age: legal age, early retirement, etc.
- [R4] Older workers' activity: active measures on labour market, unemployment benefit policies, etc.
- [R5] Income and income conditions for senior workers and retired people: level of pensions, accumulation of pensions with earnings from work, etc.

[R5] AXA, *«Baromètre AXA de retraite: Résultats Luxembourg 2007-2008», April 2008*
"AXA retirement barometer – Luxembourg results 2007-2008"

The AXA barometer on pensions is an internationally conducted survey based on a 20-minute telephone interview with a representative population selected according to age, gender and place of residence, as well as composition and main source of family income. Conducted in 27 different countries it allows a comparison of public opinions and reported experiences related to pensions. The report is limited to the poll results, which are presented in the form of (comparative) graphs and tables, while further explanations are provided extremely sparingly. Nevertheless, it is an interesting source of information about the public's opinion with regard to retirement.

[R5] BERGER, ISLAM, LIÉGEOIS, & WAGENER. *«Cross-validating administrative and survey datasets through the assessment of the 2001-2002 tax reform in Luxembourg»*, I-CUE Vienna 2008

The article evaluates the distributional effects of the 2001-2002 tax reform by comparing the advantages and methodological limitations of different datasets used. Whereas administrative data from the Social Security Warehouse contain information from the whole population, survey data extracted from the Luxembourg PSELL3/EU-SILC 2004 survey represent a sample of roughly 10,000 individuals. However, the latter contain detailed information on income, household structure and socio-economic information. The study identifies losers and winners of the tax reform as well as changing inequalities and poverty rates. The elderly seem to benefit disproportionately from the reform, in comparison with the average citizen.

[R2] IGSS (INSPECTION GÉNÉRALE DE LA SÉCURITÉ SOCIALE), *«Bilan sur la législation concernant l'incapacité de travail et la réinsertion professionnelle»*, March 2008
"Assessment of the legislation on disability and vocational rehabilitation"

The document presents a review of a number of studies assessing the impact of legislation on the effectiveness of guidance and counselling of insureds and employers related to work incapacity. It describes the various internal and external redeployment measures and evaluates the costs related to these legal provisions. In addition, the literature review in the document also includes statements on the administrative procedures applied by administrative service providers and labour and management. It concludes with a list of recommendations for improvement.

[H3; L; R2] IGSS (INSPECTION GÉNÉRALE DE LA SÉCURITÉ SOCIALE), *«Rapport générale sur la sécurité sociale 2007»*, November 2008
"General report on social security 2007"

The general report on social security is the annual reference document on all aspects of social security. The predominantly key statistical information on all Social Security branches is enriched with plenty of explanation and detailed evaluation. It contains

chapters on the covered population, health insurance, long-term insurance, pensions, occupational accident, family allowance and social inclusion. The entire statistical report is only available online, where the general report is also made available: www.statsecu.etat.lu.

[R2] KNEIP, Laurent, «*L'avénir du système des retraites au Luxembourg*», Master's Thesis at the Universities of Poznan and Freiburg, February 2008
"The future of the pension system in Luxembourg"

Kneip's Master's thesis is an acceptable examination of Luxembourg's pension system. Of particular importance is his attempt to look at the public and privately managed pension systems together. Due to the lack of a strong reporting system for the private sector, his thesis is one of the very few documents that deliver appropriate information on the pension systems of the second and third tiers. Occasional errors notwithstanding, the thesis allows an overview of the pension system.

[R1] MF (MINISTÈRE DES FINANCES), «*10th update of the Luxembourg Stability and Growth Programme*», October 2008

The annual update of the Luxembourg Stability and Growth Programme analyses the economic budget with regard to the quality and long-term sustainability of the public finances. Though examining the recent macroeconomic development, the Government outlines its strategies for the next fiscal year in line with the budgetary decisions.

[H1; R1] OECD, 'Luxembourg', «*OECD Economic Surveys*», Volume 2008/12, 2008

Based on a comprehensive external assessment of Luxembourg's economy at large, the OECD presents an extensive analysis with special chapters on the financial sector, fiscal policy, health and education. The pension system was examined under the chapter on fiscal policy in the light of the long-term viability of the public finances. With a dedicated chapter on cost efficiency in health care, analysis of the health system is much more detailed. It encompasses the reforms of the public health insurance, efficiency of the hospital sector, cost efficiency of ambulatory care and the drug prescription behaviour. The in-depth analysis is a veritable asset of the survey, whereas some recommendations appear as simple repetition of the health economics mainstream. Overall, it is an outstanding international publication on Luxembourg, available in both English and French.

[H] Health

- [H1] Health expenditures: financing, macroeconomic impact, forecasting, etc.
- [H2] Public health policies, anti-addiction measures, prevention, etc.
- [H3] Health inequalities and access to health care: public insurance coverage, regional inequalities, etc.
- [H4] Governance of the health system: institutional reforms, transfer to local authorities, etc.
- [H5] Management of the health system: HMO, payments system (capitation, reimbursement, etc.)
- [H6] Regulation of the pharmaceutical market
- [H7] Disability

[H1] CES (CONSEIL ÉCONOMIC ET SOCIALE), «*Evolution économique, sociale et financière du pays 2009*», Annual assessment 2009, April 2009
"Development of the country's economic, social and financial situation of the country in 2009"

The 2009 assessment of the Economic and Social Council is a comprehensive impact analysis of the current crisis on the country. Growing unemployment is the major concern for the council, harbouring the risk of a future social crisis. It harshly criticises the deterioration in practices in the capital market, and recalls the

importance of Luxembourg's social model. Recommendations are formulated to enlarging diversification in the financial sector as well in the real economy, where it focusses on logistics, environment and health. The assessment addresses the health care system in particular. It acknowledges on the one hand the outstanding quality of the services, but on the other it reminds of costs tending to get out of control. It favours investments in prevention and maintenance and has no clear opinion, whether or not a two-tier medical system does more harm or more good to the country.

[H4] CONSBRUCK, Roger, «*Panorama du système de santé luxembourgeois en 2009*», Ministère de la Santé, Study Report, 2009
"Panorama of the Luxembourg health care system in 2009"

The report provides a short but comprehensive overview of the current health care system in Luxembourg. It glances at the history, the legal framework, relevant actors and procedures as well as its financing system. For its length, the report provides a nearly exhaustive overview on relevant legislation as well as the number, specialties and distribution of medical professionals.

[H3; L; R2] IGSS (INSPECTION GÉNÉRALE DE LA SÉCURITÉ SOCIALE), «*Rapport générale sur la sécurité sociale 2007*», November 2008
"General report on social security 2007"

The general report on social security is the annual reference document on all aspects of social security. The predominantly key statistical information on all Social Security branches is enriched with plenty of explanation and detailed evaluation. It contains chapters on the covered population, health insurance, long-term insurance, pensions, occupational accident, family allowance and social inclusion. The entire statistical report is only available online, where the general report is also made available: www.statsecu.etat.lu.

[H1; R1] OECD, 'Luxembourg', «*OECD Economic Surveys*», Volume 2008/12, 2008

Based on a comprehensive external assessment of Luxembourg's economy at large, the OECD presents an extensive analysis with special chapters on the financial sector, fiscal policy, health and education. The pension system was examined under the chapter on fiscal policy in the light of the long-term viability of the public finances. With a dedicated chapter on cost efficiency in health care, analysis of the health system is much more detailed. It encompasses the reforms of the public health insurance, efficiency of the hospital sector, cost efficiency of ambulatory care and the drug prescription behaviour. The in-depth analysis is a veritable asset of the survey, whereas some recommendations appear as simple repetition of the health economics mainstream. Overall, it is an outstanding international publication on Luxembourg, available in both English and French.

[L] Long-term care

[L] ALOSS (ed.): 'Journée nationale de l'assurance dépendance – 17 octobre 2007', «*Bulletin luxembourgeois des questions sociales*», Vol. 24, 2008
"National conference of long-term care insurance – 17 October 2007"

The Luxembourg Bulletin of Social Questions publishes information on all aspects in the field of social security on a regular basis. Its 24th volume in 2008 is dedicated to the national conference on long-term care and provides an interesting and comprehensive overview on various aspects, national and international developments

in the field of quality of long-term care, special provision in psychiatry, geriatrics, services for the disabled and technical aid.

[H3; L; R2] IGSS (INSPECTION GÉNÉRALE DE LA SÉCURITÉ SOCIALE), «*Rapport générale sur la sécurité sociale 2007*», November 2008
"General report on social security 2007"

The general report on social security is the annual reference document on all aspects of social security. The predominantly key statistical information on all Social Security branches is enriched with plenty of explanation and detailed evaluation. It contains chapters on the covered population, health insurance, long-term insurance, pensions, occupational accident, family allowance and social inclusion. The entire statistical report is only available online, where the general report is also made available: www.statsecu.etat.lu.

5 List of Important Institutions

Association des Médecins et Médecins-Dentistes (AMMD) - Association of Physicians and Dentists

Contact person: Jean Uhrig (President)
Address: 29 rue de Vianden, L-Luxembourg
Webpage: www.ammd.lu

The AMMD is a professional association with the aim of protecting the financial interests and needs of the medical and medico-dental society at ministerial and parliamentary level and against the health insurance and the Inspection Générale de la Sécurité Sociale (IGSS), in particular with respect to the tariffs of the nomenclature.

Caisse Nationale d'Assurance Pension (CNAP) - National Pension Fund

Contact person: Robert Kieffer (President)
Address: 125 route d'Esch, L-2096 Luxembourg
Webpage: www.secu.lu

Based on the act of 13 May 2008, the National Pension Fund (CNAP) was created in 2009 as a merger of four former pension schemes. It manages the public pension fund for old age and disability for all private sector employees. Its main tasks are to administer the individual pension benefit records, to calculate the pensions according to the pension formula and to make all pay-outs of pension benefits.

Caisse Nationale de Santé - National Health Insurance Fund

Contact person: Jean-Marie Feider (President)
Address: 125, route d'Esch. L- 1471 Luxembourg
Webpage: www.cns.lu

The National Health Fund (CNS) is a public institution established by the law of 13 May 2008 and is part of the public social security system. It is responsible for organisation and management of sickness and maternity in Luxembourg as well as for the management of the long-term care insurance. It decides on the offer of benefits, contribution rates for health insurance and long-term care insurance. As a negotiating partner for all health care providers, it negotiates agreements, rates and budgets.

Cellule d'évaluation et d'orientation de l'assurance dépendance (CEO) - Assessment and Orientation Unit of the long-term care insurance system

Contact person: Nathalie Rausch (Director)
Address: 125, route d'Esch, L- 1471 Luxembourg
Webpage: http://www.mss.public.lu/dependance/index.html

The CEO is a public service under the authority of the Minister with responsibility for social security, with the mission of assessing the state of dependency and establishing a care plan integrating the assistance and care required by the dependent person. It may also, where appropriate, propose corrective measures and rehabilitation. Furthermore the CEO is also responsible for monitoring the quality of services provided and the adequacy of the services provided to meet the needs of the dependent person.

Publications: Journée nationale de l'Assurance Dépendance, Bulletin luxembourgeois des questions sociales, 2008, Vol. 24

Centre d'Etudes de Populations, de Pauvreté et de Politiques Socio-Economiques (CEPS/INSTEAD) - International Network for Studies in Technology, Environment, Alternatives, Development

Contact person: Pierre Hausman (Director)
Address: 44, rue Emile Mark, L-4620 Differdange
Webpage: www.ceps.lu

CEPS/INSTEAD is a research institute specialised in economic and social sciences. The main activities are:

- *studies on population, poverty and socio-economic affairs*
- *development and comparable analyses of large-scale scientific databases national*
- *research on Luxembourg's social security system (solidarity, personal responsibility, social security)*
- *developing analytical tools for modelling and simulating of socio-economic scenarios*
- *conducting statistical, econometric, geographic and cartographic analysis*
- *providing post-graduate training programmes*

Publications:

- *Publisher and editor of the scientific revue Population & Emploi*
- *Cross-validating administrative and survey datasets through the assessment of the 2001-2002 tax reform in Luxembourg, 2008*
- *Evolution et place des femmes sur le marché de travail*
- *Multiple publications on labour, health, social inclusion, housing, etc.*

Chambre de Travail - Chamber of labour

Contact person: Réné Pizzaferri
Address: 18, rue Auguste Lumière, L – 1012 Luxembourg
Webmail: www.ak-l.lu

The Chamber of Labour is the representation of the employees in the social dialogue. It also performs an advisory function to the Government and all publicly managed organisations. The Government is obliged to seek the opinion of the Chamber of Labour on all draft laws and regulations affecting interests of workers, the bill of the public budget as well as all issues concerning the creation and amendment of collective agreements.

Commissariat aux Assurance - Supervision authority of Insurance Institutions

Contact person: Victor Rod
Address: 7, boulevard Royal, L – 2449 Luxembourg
Webpage: www.commassu.lu

This is a public institution under the authority of the Minister of Treasury and Budget. The Commissariat is responsible for the approval of insurance, reinsurance and insurance intermediaries as well as for developing common standards on the international level and drafting laws and regulations for the insurance sector.

Confédération des organismes prestataires d'aides et de soins (COPAS) - Confederation of providers for aid and care

Contact person: Michel Simonis (President)
Address: 5, rue Génistre, L-1623 Luxembourg
Webpage: www.copas.lu

COPAS is the association of the major long-term care providers. In 2008, it counted 18 members representing all types of nursing care institutions. It defends the members' interests in negotiations with public authorities to negotiate the remuneration fee (valeur monétaire)

from the long-term care insurance scheme, or subsidiarity with trade unions on collective labour agreements.

Centre de Recherche Public – Henri Tudor (CRP-Henri Tudor) - Public Research Centre for technology and engineering

Contact person: Pierre Plumer (Head of Department)
Address: 2A rue Kalchesbrück, L-1852 LUXEMBOURG
Webpage: www.santec.lu

The mission of the Public Research Centre Henri Tudor (engineer, who invented Tudor batteries) is to strengthen the economic and social tissue of the Grand Duchy of Luxembourg. It targets a large variety of sectors from services, through finance, production and construction, to health care and social security. The department CR SANTEC is the resource Center for Healthcare Technologies. Its primary objective is to help health care professionals to better focus their activities on the patient by implementing efficient solutions and tools. Its research and development projects concern:

- *CARA - National Electronic Medical Imaging Record (see report)*
- *eSante - Analysis & Feasibility Study for eHealth (see report)*
- *HealthNet - National secure health care ITC infrastructure (see report)*
- *ISIS - Inventaire des Systèmes Informatiques de Santé (see report)*
- *CIP - Clinical Information and Performance on patient's follow-up*
- *Dose DEO (reference dose level in Computer Tomography)*
- *GECAMed - Free & Open Source Application on medical records, electronic prescription and billing for medical practices*
- *ImageMed - RIS-PACS infrastructure for all Medical Imaging*
- *LABO - Electronic Exchange of Laboratory Results*
- *Mammo - Digitalisation of the National Breast Cancer Screening Program*
- *Optimage - Optimal Image Quality for Modalities to facilitate control in radiology*

Publications:

- *IKT unterstütze Managed Care Ansätze Medica 2007, 2008*
- *Organisation du contrôle qualité en radiologie et en médecine nucléaire au Luxembourg à partir d''un outil commun, le logiciel Optimage*
- *Zur Konstrast-Detail-Bestimmung in der digitalen Mammographie*
- *Eine Studie zur Bestimmung von diagnositschen Referenzwerten für die Computertomographie in Luxemburg, 2008*
- *Mobile electronic patient diaries with barcode based food identification for the treatment of food allergies. GMS Med Inform Biom Epidemiol, 2008*

Centre de Recherche Public de la Santé (CRP - SANTÉ) - Public Research Centre for Health

Contact person: Marie-Lise Lair-Hillion (Head of Department)
Address: 1A-B, rue Thomas Edison, L-1445 Strassen
Webpage: www.crp-sante.lu

The CRP-Santé is a public institution performing basic, pre-clinical and clinical research in biomedicine and health care. A second mission is to promote public health through evaluation and information campaigns, to perform studies on health care financing and advise Luxembourg authorities on health issues. CRP-Santé also encourages the debate between professionals and the general public in areas of Biomedical Research and Public Health. CRP-Santé delivers academic training and higher education in close collaboration with major European universities and with the University of Luxembourg. It consists of six departments: Public Health; Clinical and Epidemiological Investigations; Virology, Allergology and Immunity; Immunology; Oncology; and Cardiovascular Diseases.

Challenges for society: through its research activities, CRP-Santé generates new knowledge and technological innovations that will foster economic activities in the biotechnology sector.
Publications (of the department of public health):

- *Luxembourg Acute Myocardial Registry: les femmes moins bien soignées que les hommes, Bulletin de la Société des Sciences Médicales, 2008*
- *La recherche au service de la prévention des blessures chez les jeunes sportifs de haut niveau au Luxembourg, Enjeux Santé, 2008*
- *Le développement de la recherche –action européenne en promotion de la santé mentale : Pourquoi ? Comment ?, Revue Promotion et Education hors série 1/2008*
- *Proposition d'un mode de surveillance du diabète au Luxembourg : Analyse de deux modèles de recueil de données, National Report, 2008*
- *Le diabète au Luxembourg: état de la situation à partir de données medico-administratives, Enjeux Santé, 2008*
- *Registre national du cancer : rapport de l'étude de faisabilité sur sa mise en place au Luxembourg, 2008*

Entente des hôpitaux luxembourgeois (EHL) - Luxembourg Hospital Association
Contact person: Marc Hastert (Director)
Address: 13-15 rue J-P Sauvage, L-2514 Luxembourg-Kirchberg
Webpage: www.ehl.lu

The EHL represents the providers of in-patient health care (hospitals and clinics and long-term care facilities). The association aims to defence the interests of its members and to channel all forms of progress in hospital care to improve the hospitals' competition and the well-being of the patients.

Fondation "Stëftung Hëllef Doheem" - Foundation: Help at home
Contact person: Pierette Biver (Director of Care Services)
Address: 50, avenue Gaston Diderich, L-1420 Luxembourg

With over 1,000 employees, Hëllef Doheem is not only the largest ambulatory care provider in Luxembourg, but among the biggest employers in Luxembourg. Hëllef Doheem currently supplies services to more than 5,000 patients, fully or partly covered by both health and long-term care insurance. The organisation plays a very active role in the development of care concepts and applied research.

Inspection Générale de la Sécurité Sociale (IGSS) - General Inspectorate of Social Security
Contact person: Mr. Raymond Wagener (Head of Department)
Address: 26, rue Sainte Zithe L-2763 Luxembourg
Webpage: www.mss.public.lu

Under the authority of the Ministry of Social Security, IGSS is entrusted with

- *development of legislation and regulations on social security;*
- *control of social institutions under government responsibility, which under the laws and regulations is vested in the Government*
- *actuarial analysis of pension and health systems*
- *collection of the necessary statistical data both nationally and internationally*

IGSS is further responsible for the supervision of the supplementary pension schemes as well as the assessment of applications to receive nursing care benefits. The latter service, cellule d'évaluation et orientation (CEO) is attached to IGSS.
On international level, IGSS acts as the reference institution for social security issues related to cross-border aspects.
Publications:

- *Bilan technique de la période de couverture 1999-2005, December 2005*

- *Bilan sur la législation concernant l'incapacité de travail et la réinsertion professionnelle, March 2008*
- *Rapport générale sur la sécurité sociale 2007, November 2008, www.statsecu.etat.lu*

Ministère de la Santé - Ministry of Health

Contact person: Mars di Bartolomeo (Minister)
Address: Allée Marconi, Villa Louvigny, L - 2120 Luxembourg
Webpage: www.ms.etat.lu

The Minister of Health is responsible for the definition and implementation of health policy, monitoring of the implementation of laws and health regulations, supervision of institutions and health services. The supervision of health services is ensured by the Directorate of Health.
Publication: Panorama du système de santé luxembourgeois en 2009, Ministère de la Santé, Study Report, 2009

Service central de la statistique et des études économiques (STATEC) - Central service for statistics and economic studies

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STATEC is responsible for collecting as well as for analyzing and modelling data to better understand phenomena of an economic and social nature. It is a scientific and administrative independent statistical office, which collects and computes data in areas ranging from production of goods and services to social cohesion and (un)employment, prices and wages, innovation and entrepreneurship. Statec is further involved in micro and macroeconomic forecasts, partly undertaken for third parties.
Publications:

- *Economie et statistiques*
- *Cahiers économiques*
  - *No. 107, Rapport Travail et Cohésion sociale 2008*
  - *No 106 Rapport Travail et Cohésion sociale 2007*
  - *No 105 Egalité hommes-femmes, mythe ou réalité?*

Union des Enterprises Luxembourgeoises (UEL) - Union of Luxembourg Enterprises

Contact person: Pierre Bley c/o Chambre de Commerce
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UEL is the non-profit umbrella organisation of employers. In the social dialogue it defends the convergent interests of businesses and employers. The composition of the UEL bodies reflects the economic sectors that it represents. Working groups are established on a permanent basis covering topics including legislation, over taxation, economic studies, education and training schemes, environment and land use. The UEL also serves as a forum for topics concerning the European Union.

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(1) to improve the knowledge and understanding of the situation prevailing in the Member States (and in other participating countries) through analysis, evaluation and close monitoring of policies;
(2) to support the development of statistical tools and methods and common indicators, where appropriate broken down by gender and age group, in the areas covered by the programme;
(3) to support and monitor the implementation of Community law, where applicable, and policy objectives in the Member States, and assess their effectiveness and impact;
(4) to promote networking, mutual learning, identification and dissemination of good practice and innovative approaches at EU level;
(5) to enhance the awareness of the stakeholders and the general public about the EU policies and objectives pursued under each of the policy sections;
(6) to boost the capacity of key EU networks to promote, support and further develop EU policies and objectives, where applicable.

For more information see:
http://ec.europa.eu/employment_social/progress/index_en.html