MINISTRY OF ECONOMY AND FINANCE
Department of General Accounts
General Inspectorate for Social Expenditure

Mid-long term trends for the pension and health care systems

The forecasts of the Department of General Accounts updated to 2002

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Summary and conclusions

This report illustrates the results of forecasts regarding the pension and health care systems carried out using the models of the Department of General Accounts (Ragioneria Generale dello Stato - RGS), updated to 2002. The updating of these models was completed by mid-June of the current year according to the time schedule set for the elaboration of Economic and Financial Planning Document (Documento di Programmazione Economica e Finanziaria - DPEF) 2003-2006. Specifically, this document included a synthetic description of updated forecasts relating to national baseline and programmatic scenarios, within two boxes referring, respectively, to the pension and health care systems. Some few months later, these same forecasts were slightly revised to take into account the corrected estimates of economic growth for 2002 outlined in the Forecasting and Planning Report (Relazione Previsionale e Programmatica – RPP) for 2003.

In order to guarantee the comparability of results, the forecasts defined within the Working Group on Ageing of the Economic Policy Committee of the Ecofin Council (EPC-WGA), according to the baseline and Lisbon scenarios, have also been updated. The analytical results, structured along the lines agreed within the working group, were forwarded to the EPC-WGA in early October. As is normal practice, they were accompanied by a note illustrating both the procedures used in updating and the differences with respect to the previous forecasts obtained with the model updated to 2001. Such results were, subsequently, utilised to assess long term sustainability of welfare expenditure within the updating of Italy's Stability Programme (Ministero dell'economia e delle finanze, 2002b)

In addition, that part of the updated forecasts relating to pension expenditure was included in the Italian National Strategy Report on Pensions (Ministero di Lavoro e delle Politiche Sociali, 2002). This latter formed part of a joint project involving both the Social Protection and the Economic Policy Committees of the European Union (European Commission, 2002).

The updating procedures, beyond utilising the final data relating to the year 2000, principally regard the following points: i) modifications to the legal-institutional framework as foreseen in the budgetary law for 2002; ii) revised statistics referring to the year 2001; iii) updating of the forecast GDP growth for the year 2002; iv) the revised data concerning the insured of the Employees Pension Fund (Fondo Pensioni Lavoratori Dipendenti – FPLD) and the three funds of the self-employed which belong to the National Social Security Institute (Istituto Nazionale di Previdenza Sociale - INPS); v) some methodological improvements aimed at strengthening the forecasting model regarding participation rates and, finally, vi) updating of the estimates concerning health care consumption profiles by age, sex and kind of service. The forecasts obviously do not take into account those measures which have been included in the budgetary law for the year 2003.[1]

[1] In particular, the forecasts do not take into account the effects following on from the possibility of accumulating pensions with work-related earnings for those subjects drawing a pension of at least 58 years of age and with a minimum of 37 years of contributions.

As far as changes to the pension framework are concerned, the most relevant intervention has been that of increasing pensions of a lower figure to a monthly sum of 516 euros by way of the social assistance increase. This measure was introduced in the budgetary law of 2002 (Low 448/2001. article 38) and came into effect in January of the same year. The increase in the pension amount chiefly relates to social pensions (old age allowances if awarded after 1995) and social security pensions (i.e., those based on contribution requirements) awarded to subjects with a personal income and combined with that of a spouse, lower than determined minimum levels. According to the definition of pension expenditure adopted by the RGS for the purpose of forecasting the financial effect of the measure under consideration has been initially estimated as 1,800 million euros for 2002, corresponding to 0.14% of GDP.[2]

As regards health care expenditure, the distributive effects from the legal-institutional framework in force either in 2000 or 2001 has been assumed depending on the availability of analytical data to estimate health care consumption profiles, by age and sex, referring to the various categories of spending. In other words, on the basis of the methodology agreed within the EPC-WGA, the profile of health care consumption for age and sex estimated for 2001 has been maintained constant for the entire forecasting period. The level of health expenditure for 2002, on the other hand, has been forecast on the basis of the legal-institutional framework in force in the same year.

As far as the national baseline scenario is concerned, the forecasts also take into account certain measures already adopted at central and local governments which aim at curbing the growth of health care expenditure in the years immediately following 2002. In particular, these relate to the financial effects caused by the law 405/2001, passed on the basis of the 8th August 2001 agreement between state and regions. As for the EPC-WGA baseline and the Lisbon scenarios, however, such effects have not been taken into account so as to avoid any possible deviation with respect to the common methodology agreed within the EPC-WGA.

Concerning the revision of the data relating to 2001, which form the starting point for the forecasts themselves, it should be pointed out that the relationship between pension expenditure and GDP is slightly higher than that originally forecast for that same year (13.83% as against 13.77%). The reason for this deviation is to be sought in a lower growth of nominal GDP whilst pension expenditure has resulted just a little lower than that forecast (around 300 million euros). The lower growth of nominal GDP registered in 2001 is equal to around 0.6% and depends for one third on real growth and for two-thirds on the deflator.

The ratio of health care expenditure to GDP for 2001 has been the object of a considerably more marked upward revision. The updated value is set around 5.96%, showing an increase of about 0.3 percentage points with respect to the previously

[2] At the time of the preparation of the budgetary law for 2003, the expenses consequent to the application of article 38 of the law 448/2001 had been ascertained as running at a level lower than that foreseen. This saving has been largely used to refinance the increased cost of pension benefits allowed to workers exposed to asbestos, arising from the increased number of beneficiaries.

forecast value of 5.69%. Such a growth is due for about four-fifths to a higher level of health expenditure and for about one fifth to the lower growth of nominal GDP referred to above. About half of the upward correction in health care expenditure (1,300 million euros) depends on the revised data communicated by the regions to the information system of the Ministry of Health and utilised by Istat (National Institute of Statistics) for the estimates published in March 2002[3]. Following this, Istat updated these estimates in June of the same year on the basis of new information elements arising from rectification of the data transmitted by the regions.

Economic growth for 2002, along with its decomposition in terms of productivity and employment, is coherent with the indications contained in the RPP 2003, which updated the forecasts of the macroeconomic framework indicated in the DPEF 2003-2006[4]. In comparison with the previous forecasts obtained with the model updated to 2001, the growth of GDP shows a figure revised downwards in all the scenarios under consideration. The reduction is of 1.8% in the national baseline scenario and of 2.3% in the programmatic one. Considering the EPC-WGA projections, the reduction is of 1.9% and of 2.7%, respectively, in the baseline and Lisbon scenarios.

Within the "extraordinary" updating procedures of the model, the revision of the data concerning the insured registered in the main funds managed by INPS assumes a particular significance. Specifically, this revision relates to the distribution by age, sex, contribution years, insured status (contributor, dormant, pensioner-contributor) and regime (earnings-related, contribution-based, mixed) of the insured persons enrolled on the 31st December 2000 in the FPLD and the three funds for the self-employed (artisans, shopkeepers and farmers). The results of this revision were made available by INPS at the beginning of 2002. This data base has replaced the one utilised in the previous updating of the model relating to the year 2001.

The new estimates of the insured have benefited from the development of information technology procedures which has characterised recent years. In particular, the possibility to cross reference information stored in files, which were once separated and organised to meet exclusively administrative needs, has brought about a significant reduction of the so-called 'dormant' numbers - i.e., those insured persons with pension rights who have not contributed to the system in the reference year.

As regards the quota of dormants who, on the 31st December 2002, had already reached a position to satisfy the minimum contribution requirements to be entitled to an old age pension, this reduction was of more than 400 thousand, almost all concentrated in the age group of up to ten years less than the retirement age. As a consequence, the corresponding reduction in the numbers of old age pensions will be

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[3] Such a revision was brought about by a more thorough verification activity co-ordinated by the Ministry of Health, upon the budget data of the Local Health Bodies and Hospitals (Aziende Sanitarie Locali and Aziende Ospedaliere – ASL/AO) initially provided by the regions.

[4] Obviously the forecasts based on the national scenarios included in the DPEF 2003-2006 do not take into account this latest revision.

almost completely realised by 2010. Given that the average survival period for that category of pensions is roughly a couple of decades, the data base revision will not produce any significant effects in the second half of the forecasting period.

Furthermore, the updating of the models has benefited from certain methodological improvements regarding the forecasting of participation rates by using a generational approach. The adjustments put into place have allowed to manage better the graduality of the transitional phase from current levels to those defined as scenario hypotheses. This can be done taking into consideration the endogenous components which depend on the interaction with the educational and pension systems and demographic dynamics. The estimate of the generational profiles of participation rates has been made on the basis of the results of the labour force survey referring to the period 1993-2001 taking into account the last two-year period (2000-2001) which had not been included in the data for previous estimates.

Finally, it is worthwhile pointing out improvements concerning the estimates of the health care consumption profiles by age, sex and kind of service. Beyond utilising additional data, such improvements have been mainly concerned with the estimate of consumption profiles by kind of service according to the definition adopted for the specification of the "Essential Health Care Services" (Livelli Essenziali di Assistenza – LEA)

The updating to 2002 of the RGS's forecasting models does not involve any significant alterations as regards the definition of the national baseline scenario (cf. table A).

The underlying demographic framework is based on the hypotheses on fertility, mortality and migration flows from the Istat main variant scenario, the same already utilised in the previous updating. The only novelty concerns the forward movement, from 2000 to 2001, of the initial year of the forecast (Ministero dell'economia e delle finanze - RGS, 2001).

The definition of the macroeconomic framework substantially confirms the productivity and employment assumptions already adopted for previous forecasts. In the national baseline scenario productivity is set at an annual average of around 1.7% (2% from 2026, and gradually increasing towards that figure in the preceding years), whilst the hypotheses relating to the labour market determine a dynamic of the employment figures which move, for the age group 20-64, from 58.1% in 2001 to 68.8% in 2050 (Ministero dell'economia e delle finanze – RGS, 2001).

The national baseline scenario assumes, for the period 2003-2006, a growth rate of GDP of about 2%, substantially in line with the average growth of the last twenty years. This choice, which is consistent with that taken in the previous forecasts, is aimed at better capturing the long term trends of those factors which condition the structural equilibrium of the pension and health care systems (such as demographic evolution, changes to the structure of participation and employment rates, the long term growth of productivity, etc.).

On the basis of the demographic and macroeconomic frameworks outlined above, the real growth rate of GDP settles at an annual average of between 1.4% and 1.5% for the entire forecasting period.

Over the long period, the forecast for the public pension system updated to 2002 confirms the results already known, in that none of the factors underlying the structural dynamic of the phenomenon have undergone relevant changes as an outcome of the updating procedures listed above (figure A1). The ratio of pension expenditure to GDP shows a more or less constant growth through the first three decades of the forecasting period, where it presents an increase of more than 2 percentage points of GDP, passing from 13.8% in 2001 to a maximum value of 16% in 2033. After this, the value decreases rapidly to settle around 13.6% in 2050. The dynamic of the initial fifteen years, with the exception of the first five years, is due almost exclusively to an increase in the number of pensions, whilst the ratio between average pension and productivity remains substantially unchanged. This latter ratio decreases in the central part of the forecasting period under the effect of the gradual introduction of the contribution-based method of calculation (mixed regime) which causes a slowdown of the growth rate of pension expenditure. In the last phase, the ratio of pension expenditure to GDP falls rapidly owing to the shift from the mixed regime to the contribution-based one (pension is entirely calculated according to the contribution-based method). Contemporaneously, there is first a slowdown and then a turnaround in the ratio of pensions to the employed. This latter phenomenon is a consequence of the progressive elimination through death of the baby boom generations.

In comparison to the forecast of 2001, a slight increase in the ratio of pension expenditure to GDP may be noticed for those years in which the curve reaches its maximum values, largely due to the increase of lower pensions to 516 euros per month introduced by the budgetary law for 2002. In the first part of the forecasting period such an effect is more than compensated for by the reduction in the number of old age pensions arising from the revision of the data referring to the insured of the FPLD and the self-employed funds referred to above.

The forecast for the ratio of public health care expenditure to GDP has been carried out on the basis of the methodological indications agreed within the EPC-WGA (Economic Policy Committee, 2001).

In particular, the evolution of health expenditure in the mid-long term period is expressed as a function of three factors. The first of these measures variations in expenditure which are attributable to the evolution of the population by age and sex. The second expresses the effect due to changes in health consumption profiles by age, sex and kind of service. The third measures the variations in health expenditure given the hypothesis that demographic structures and consumption profiles will remain unchanged. To be more precise, this latter factor expresses the evolution of Standardised Per capita Consumption (Consumo Pro capite Standardizzato - CPS), that is the evolution of the consumption of a general individual, irrespective of the class of health needs to which he belongs.

In order to remain consistent with the methodological choices adopted within the EPC-WGA, it has been assumed that the health consumption profiles were constant throughout the entire forecasting period and that the CPS would evolve in line with per capita GDP. However, as a partial exception to the methodological indications cited above, for the period 2002-2006, the forecast of health care expenditure has been made taking into account: the financial effects of the 8th August 2001 agreement between state and regions, the containment measures already foreseen by current legislation and the results from the information system of the Ministry of Health relating to the fourth quarter of 2001.

The forecast of the ratio of public health care expenditure to GDP following the national baseline hypotheses (figure A2 – curve in bold print) shows a more or less regular growth until 2035. Only in the final fifteen years of the period does the rate of growth decrease, this for well-known demographic reasons (the exit by way of death of the baby boom generations). Over the entire forecasting period the ratio increases by two percentage points, passing from 6% in 2001 to 8% in 2050.

Compared with the forecast obtained by using the 2001-updating of the model, the ratio of health care expenditure to GDP has resulted in a higher figure of about 10%, as an average, staring from 2006. To this difference the revision of the starting value, referred to above, contributes relevantly.

The analysis of the health care expenditure evolution by macro-level demonstrates a growth of the long term care component more relevant, in percentage terms, than the acute one, following a trend common to many other economically advanced countries. However, it should be noted that the relative size of long term care is noticeably low in Italy (around 10% of the total public health care expenditure) as distinct from northern European countries.

Taken together, the evolution of public expenditure on pensions and health care (figure A3) shows a trend towards growth in terms of GDP for the greater part of the forecasting period. Starting at 19.8% in 2001 it reaches a maximum value of 23.5% in 2034, thereafter decreases gradually to 21.6% in 2050, over one percentage point higher than its starting level. The leading role played by pension expenditure is quite evident because of its considerably greater dimension.

The thin curve shown in figure A demonstrates the effects brought about by putting into practice the policies planned in terms of employment and productivity growth rates which are incorporated in the last DPEF. In particular, the higher economic growth assumed in this scenario, for the period 2003-2006, produces an initial reduction of the ratio of both pension and health care expenditures to GDP. In the case of pension expenditure, however, the initial improvement progressively declines as the higher employment levels and the greater productivity growth are transformed into a greater number of pensions of a higher average value. The case of health care expenditure is different. Here, the initial improvement in the ratio of CPS to per capita GDP is maintained in an almost constant measure throughout the forecasting period.

The forecasting activity using national scenarios runs alongside that conducted at the EU level, based on homogeneous demographic and macroeconomic scenarios

defined within the EPC-WGA research project. The principal object of this project is to analyse, comparatively, the financial sustainability of welfare expenditure in the light of the profound demographic changes underway. Regarding procedure and methodology, each member state was made responsible for the official production of forecasts relating to their country, using their own forecasting models, but adopting the scenario hypotheses defined for each of them within the EPC-WGA. The results of this activity, at present limited to pension and health care expenditures, were published by the Economic Policy Committee last November (Economic Policy Committee, 2001).

Given the fact that the models utilised in the Italian case to elaborate the EPC-WGA forecasts are exactly the same as those used for the national ones, any differences found between the two sets of results are entirely attributable to the scenario hypotheses.

The main differences between the two baseline scenarios, respectively defined at the EPC-WGA and national levels, can be seen by comparing tables A and B. Such differences are not particularly significant, especially when they refer to the average values over the entire forecasting period. The growth rate of GDP is slightly lower than that of the national baseline scenario, showing a disparity of 0.1%, which is entirely attributable to the employment growth. However, a greater divergence may be found by observing the temporal profile of economic growth. The baseline scenario shows an acceleration in the first two decades of the forecasting period and a slowdown in the succeeding phase.

The differences do not seem relevant also when considering the demographic parameters referring, respectively, to the Istat and Eurostat main variant scenarios. The former exceeds the latter in terms of migratory flow and shows a higher level of life expectancy in 2050. Differently, the differences in the fertility rates indicate an alternating course; the Istat rates are higher in the first part of the forecasting period and lower in the second. It is evident enough that the differences between the hypotheses of mortality and those on migratory flow tend to balance each other out, as far as the effects on the ratio of health care and pension expenditure to GDP are concerned.

Comparing the assumptions of the Lisbon scenario with those of the national baseline scenario shows up more marked differences. These, however, do not so much concern the average growth of GDP, which settles at a level slightly lower than that of the national scenario, but its decomposition into the productivity and employment components. The former shows an average reduction of about 0.6 percentage points per year whilst the latter is higher by a substantially equivalent percentage. The greater growth of employment is as much due to more optimistic hypotheses regarding the evolution of participation rates, particularly amongst females, as to the lower reduction of working age population. In this regard it should be remembered that the Lisbon scenario follows the high variant scenario of the Eurostat demographic forecasts, which assumes a more sustained increase in all three demographic parameters than does the main variant scenario produced by Istat, as may be seen from the tables A and C.

The results of the forecasts made within the EPC-WGA are shown in figure B in comparison with those resulting from the adoption of the national baseline scenario. Compared with this latter, the EPC-WGA baseline scenario generates a ratio of pension expenditure to GDP significantly lower in the first part of the forecasting period and higher in the following period, with the two curves crossing over around 2032. The differences recorded depend prevalently on the diverse temporal profile of GDP growth, which produces direct effects on the denominator of the ratio, and indirect effects on the number and average amount of pensions in the second part of the forecasting period. Differently, the ratio of health care expenditure to GDP forecast on the basis of the EPC-WGA baseline scenario shows a result which is perceptibly lower than that of the national baseline scenario beyond 2030. This slight discrepancy mainly depends on the different demographic trends underlying the forecasts which are being compared, especially regarding the life expectancy assumptions. In summary, compared to the national baseline scenario, that made by the EPC-WGA shows a growth in the total pension and health care expenditures, in terms of GDP, initially more contained and thereafter higher in the final part of the forecasting period, with a deviation of some 0.4 percentage points in 2050.

The hypotheses of the Lisbon scenario, on the other hand, are such as to generate a growth of total expenditure to GDP notably more contained with respect to both the EPC-WGA and national baseline scenarios. Such an outcome results chiefly from the pension component which, in terms of GDP, is over 1 percentage point lower for most of the forecasting period. This mainly depends on the strong increase in participation rates, particularly in the female field, which produces an immediate increase in GDP but is transformed into a greater number of pensions with an average delay of 35 years. The consistent increase in participation rates in the 57-65 age bracket is also particularly significant and has been obtained thanks to an increase of the average retirement age by about three years under the contribution-based regime. In this instance, the effect due to the increase in the number of the employed is reinforced by the contextual reduction in the number of pensions. The higher pension amounts which result from the postponement of retirement, due both to increased contribution years and to higher transformation coefficients, only come about gradually through time and determine the substantial realignment of the curves by the close of the forecasting period.

The differences relating to the health care component of the total expenditure are easier to interpret. They depend largely on the different growth of per capita GDP following on from the adoption of different scenario assumptions. In particular, the average growth rate of this variable, to which the CPS is linked for the purpose of the hypothesis, accounts for 1.4% in the Lisbon scenario as against 1.7% in the EPC-WGA baseline scenario.

The analytical data relating to the results of the forecasts are shown in the annex. As far as possible, the framework agreed within the EPC-WGA has been followed in the presentation. The only information eliminated is that which was quite clearly duplicated. Therefore, the table of results relating to the forecasts worked out within the EPC-WGA is exactly the same as that formally delivered to the EPC-WGA and

used in the official documents of our country elaborated within the European Union (Italy's Stability Programme, National Strategy Report on Pensions).

There is no reason which would render it either useful or significant to update the results published last year relating to the sensitivity analyses of the demographic, macroeconomic and legal-institutional hypotheses. Specifically, as regards the national scenarios, it is possible to consult the previous report of the RGS (Ministero dell'economia e delle finanze – RGS, 2001), whilst for the scenarios defined within the EPC-WGA the report of the Economic Policy Committee published in November 2001 should be referred to (Economic Policy Committee, 2001).

The analysis carried out in this report allows the following results to be detailed:

a) as regards the updating procedures applied to the forecasting models in the course of 2002, the most important aspects regard the acquisition of the new data for the insured of the principal INPS funds, the increase to 516 euros of the lower amount pensions by way of the social assistance increase, and the revision of the initial level of health care expenditure. The new data has determined a significant slowdown of the growth rate of pension expenditure in the first decade of the forecasting period, due to a lower number of old age pensions, but has not significantly altered the long term equilibrium. Raising the amount of the lower pensions has determined an increase in the ratio of pension expenditure to GDP which affects the entire forecasting period, albeit with a decreasing profile. In contrast, the revision of the initial level of health care expenditure has caused an increase in the ratio of health care expenditure to GDP which remains stable, as a percentage, throughout the entire forecasting period.

b) The updating procedures of the models, whilst in certain cases significant, have not in any way modified the structural factors underlying the evolution of welfare expenditure on pension and health care in terms of GDP. The forecasts for such expenditure growth relating to our country therefore remain more contained compared to the average for the EU countries (Economic Policy Committee, 2001), notwithstanding a more intense ageing process. This result depends essentially on two circumstances: the process of reform of the pension system carried out in the 1990's, and the modest size of the long term care component which represents the macro-level of public health care expenditure most exposed to the effects of ageing.

c) The overall picture of the results does not significantly differ whether the national baseline scenario or that defined by the EPC-WGA is adopted. In both cases public expenditure for pensions and health care in terms of GDP reaches its maximum value in the five-year period 2031-2035, settling around a substantially equivalent level (23.5% in the first case, 23.6% in the second). The baseline scenario of the EPC-WGA does, however, show a less worrying situation in the first part of the forecasting period compared to a slight worsening in the second part. This is essentially due to the different temporal profiles for economic growth which characterise the two scenarios.

d) The Lisbon scenario of the EPC-WGA, on the other hand, produces a strong curtailment of the growth of total expenditure on pensions and health care in terms of GDP. This result essentially comes about because the pension component is almost stabilised, whilst improvements achieved in the field of health care are decidedly less remarkable. The hypotheses underlying the Lisbon scenario do, however, take account of the adoption of policies capable of determining important effects on employment levels. In particular, a marked increase in youth employment rates is assumed, alongside the alignment of female employment rates with those of males, already significantly increased with respect to current levels, and a notable increase in the employment rates of elderly workers by way of a postponement of roughly three years of the retirement age under the contribution based-method.

e) As far as the pensions system is concerned, the measures which have contributed more to the containment of the ratio between pension expenditure and GDP are as follows; i) the elimination of the real component of pension indexation shifting to a system of solely price indexation; ii) the tightening up of the minimum requirements for early retirement in the transitional period; iii) the introduction of the contribution-based regime which awards pensions related both to the lifelong contributions and to the life expectancy of the beneficiaries, according to actuarial equivalence; iv) the ten-yearly revision of the transformation coefficients as a function of the evolution of life expectancy.

f) Decomposition of the ratio between pension expenditure and GDP demonstrates the expansive effect of the demographic component (ratio of pensions to the employed) and the compensatory, contextual effect exercised by the legal-institutional component (ratio of average pension to productivity). The expansive effect of the demographic component is due as much to an absolute increase in the numbers of the elderly population, consequent to lower mortality and the progressive ageing of the baby boom generations, as to the marked reduction of the working age population. The curtailment of the ratio between average pension and productivity is caused by the elimination of the real component of indexation, in the first part of the forecasting period, and by the gradual introduction of the contribution-based method, in the second part.

g) As regards health expenditure, the factor which contributes more to limit the impact of ageing on the costs of the system is the modest dimension of the long term care component. In fact, the analysis by macro-level has shown that the growth of this component proceeds at more than double the velocity of that of acute care, with the consequent variation of relative size by the end of the forecasting period. Such a process, common to many other economically advanced countries (Economic Policy Committee, 2001), has very different connotations for southern European countries, where the long term component has limited incidence (around 10% of the public health care

expenditure in Italy) compared to those of northern Europe, where it already takes up a sizeable percentage of GDP.

h) The growth of health care expenditure in terms of GDP could be curbed by way of the adoption of economic policies aimed at reducing the CPS in a measure sufficient to balance the expansive effect of consumption brought about by ageing. However, such a reduction is of consistent proportions in terms of per capita GDP. This means that the resources available to satisfy the health needs of each citizen, in relation to the total produced, would be notably less than at present. It will therefore be necessary to improve significantly the efficiency and effectiveness of the public health system in order to avoid a progressive worsening of the level of "health well-being" that has been reached.

i) Decomposition of the dynamic underlying the ratio between health care expenditure and GDP into different explicative factors shows the strong impact of the demographic component, as much on the numerator (increase of health care expenditure) as on the denominator (slowdown of GDP growth) of the ratio. However, both the growth of the employment rate, which compensates in part for the drop of the working age population, and the economic policy assumption adopted move in the opposite direction. Linking CPS to per capita GDP in fact neutralises the effects on the ratio brought about by a modification of the employed as a share of the total population.

Tab. A: national baseline scenario

		2001	2010	2020	2030	2040	2050
Demographic assumtions Istat main variant base year: 2001	**Fertility rate**	1,3	1,4	1,4	1,4	1,4	1,4
	Life expectancy						
	- male	76,4	77,9	79,6	81,4	81,4	81,4
	- female	82,7	84,4	86,2	88,1	88,1	88,1
	Annual net immigration ('000s)	111	113	116	119	121	124
	Elderly dependency ratio[(1)]	29,4	34,1	40,3	50,0	64,9	68,8
Macroeconomico assumptions values in %	**Partecipation rates [20-64]**						
	- male	77,9	80,7	80,5	78,2	78,7	79,3
	- female	49,9	54,9	55,7	57,3	62,2	64,2
	- total	63,9	67,9	68,2	67,9	70,6	71,9
	Unemployment rates						
	- male	7,3	6,5	6,4	5,6	4,3	3,5
	- female	13,0	11,2	10,7	8,8	6,9	5,8
	- total	9,5	8,4	8,1	6,9	5,4	4,5
	Employment[(2)]						
	- male		0,4	-0,3	-0,8	-1,0	-0,6
	- female		1,0	-0,2	-0,2	-0,2	-0,4
	- total		0,6	-0,3	-0,5	-0,6	-0,5
	Productivity[(2)]		1,0	1,6	1,9	2,0	2,0
	Real GDP[(2)]		1,6	1,4	1,4	1,3	1,5

(1) Population of age 65 and more over population 20-64. Values in %
(2) Avarage annual percentage change in the preceding decade. The first value refers to the period 2002-2010

Tab. B: EPC-WGA baseline scenario

		2001	2010	2020	2030	2040	2050
Demographic assumtions Eurostat main variant base year: 1999	**Fertility rate**	1,2	1,4	1,4	1,5	1,5	1,5
	Life expectancy						
	- male	75,7	77,4	79,0	80,1	80,7	81,0
	- female	82,1	83,4	84,5	85,3	85,8	86,0
	Annual net immigration ('000s)	51	80	80	80	80	80
	Elderly dependency ratio[(1)]	29,3	33,8	39,7	49,2	63,9	66,8
Macroeconomico assumptions values in %	**Partecipation rates [20-64]**						
	- male	78,2	80,9	80,9	79,3	79,0	79,0
	- female	50,1	55,0	56,4	59,7	65,8	68,7
	- total	64,1	68,0	68,8	69,7	72,6	74,0
	Unemployment rates						
	- male	7,3	6,9	6,6	6,2	5,6	5,4
	- female	13,0	11,8	11,0	10,2	9,4	9,0
	- total	9,5	8,9	8,4	7,9	7,3	7,0
	Employment[(2)]						
	- male		0,2	-0,4	-0,9	-1,3	-0,8
	- female		0,8	-0,2	-0,3	-0,3	-0,4
	- total		0,4	-0,3	-0,7	-0,9	-0,7
	Productivity[(2)]		1,6	1,75	1,75	1,75	1,75
	Real GDP[(2)]		2,1	1,4	1,1	0,8	1,1

(1) Population of age 65 and more over population 20-64. Values in %

(2) Avarage annual percentage change in the preceding decade. The first value refers to the period 2002-2010

Tab. C: EPC-WGA Lisbon scenario

		2001	2010	2020	2030	2040	2050
Demographic assumtions Eurostat high variant base year: 2001	**Fertility rate**	1,4	1,6	1,7	1,8	1,8	1,8
	Life expectancy						
	- male	76,2	78,6	80,8	82,4	83,5	84,0
	- female	82,5	84,2	85,8	86,9	87,6	88,0
	Annual net immigration ('000s)	76	106	100	100	100	100
	Elderly dependency ratio[(1)]	29,4	34,4	40,8	49,9	63,1	64,7
Macroeconomico assumptions values in %	**Partecipation rates [20-64]**						
	- male	78,1	83,1	84,5	85,4	88,5	88,6
	- female	50,0	61,9	69,4	76,1	85,0	85,8
	- total	64,1	72,6	77,1	80,9	86,8	87,2
	Unemployment rates						
	- male	7,3	6,4	5,5	4,8	4,0	3,1
	- female	13,0	11,1	9,6	8,3	6,6	4,9
	- total	9,5	8,4	7,3	6,4	5,2	4,0
	Employment[(2)]						
	- male		0,7	0,0	-0,2	-0,4	-0,3
	- female		2,3	0,8	0,5	0,3	-0,1
	- total		1,3	0,3	0,1	-0,1	-0,2
	Productivity[(2)]		1,2	1,2	1,1	1,0	0,9
	Real GDP[(2)]		2,5	1,6	1,2	0,9	0,7

(1) Population of age 65 and more over population 20-64. Values in %
(2) Avarage annual percentage change in the preceding decade. The first value refers to the period 2002-2010

Figure A: expenditure ratio to GDP - national scenarios

Figure A1: public pension expenditure

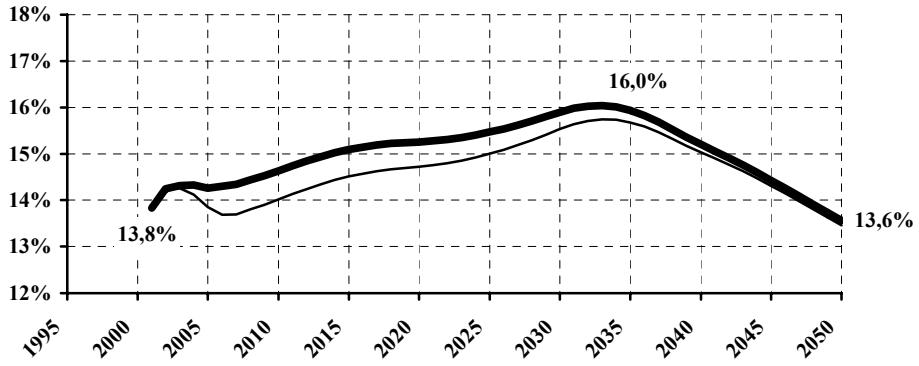


Figure A2: public health care expenditure

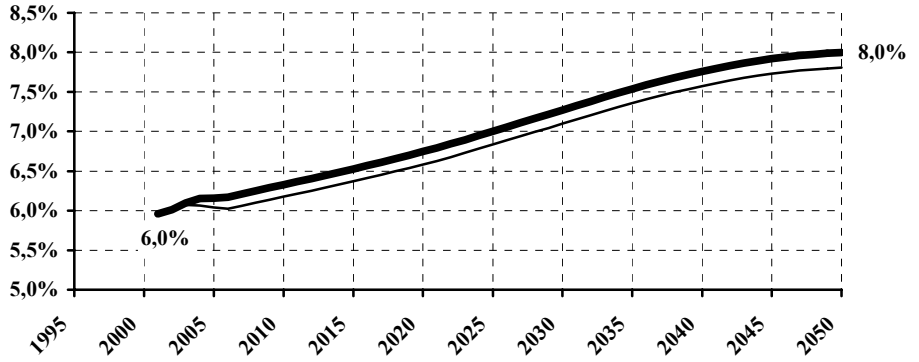


Figure A3: public expenditure for pensions and health care

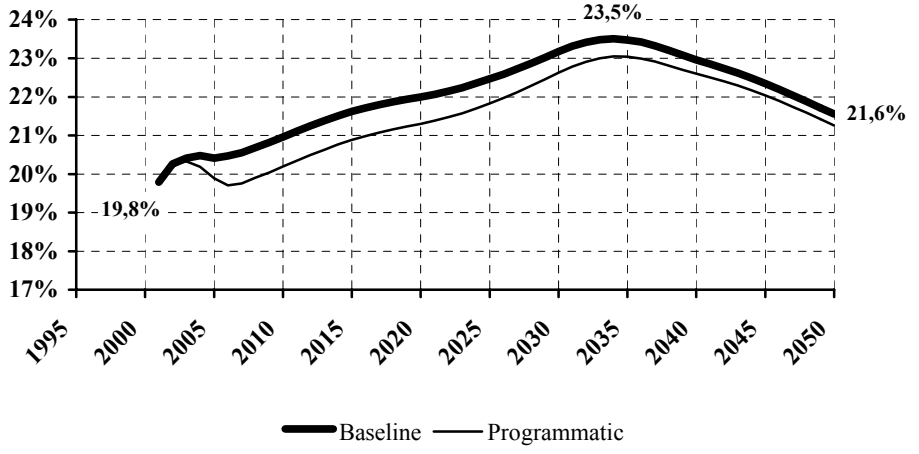


Figure B: expenditure ratio to GDP - national and EPC-WGA scenarios

Figure b1: public pension expenditure

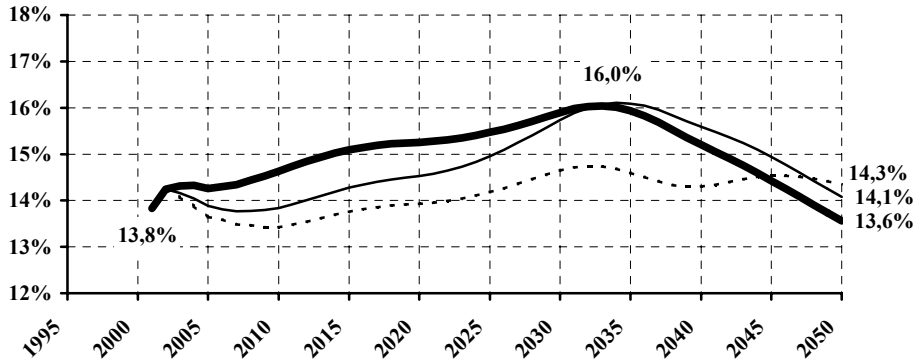


Figure B2: public health care expenditure

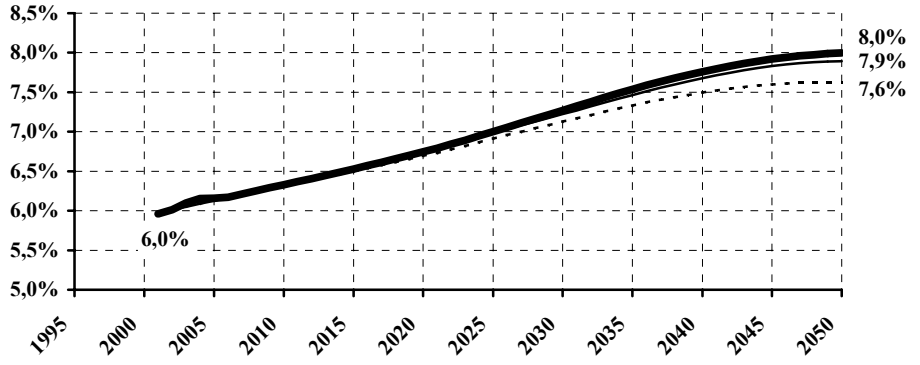
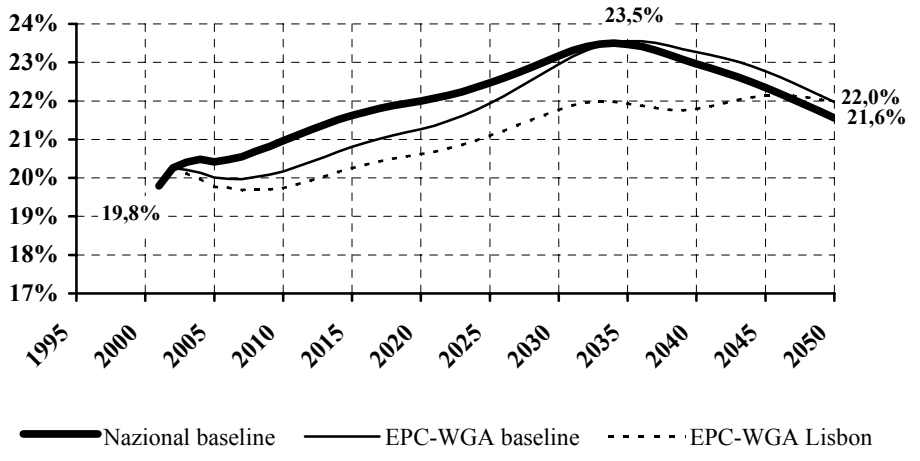


Figure B3: public expenditure for pensions and health care



Annex: the results of the forecasts - tables

A1 - National baseline scenario: demographic assumption (Istat main variant)

A1.1 - Demographic parameters

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Migration flows (thousands)	50.668 (a)	169.471 (a)	111.867	113.290	114.945	116.479	117.711	118.690	119.727	120.985	122.364	123.714
Fertilitity rate (children per women)	1,19 (b)	1,24 (b)	1,38	1,40	1,41	1,41	1,41	1,41	1,41	1,41	1,41	1,41
Life expectancy (male)	74,8 (c)	76,3 (d)	77,1	77,9	78,7	79,6	80,5	81,4	81,4	81,4	81,4	81,4
Life expectancy (female)	81,4 (c)	82,4 (d)	83,5	84,4	85,3	86,2	87,2	88,1	88,1	88,1	88,1	88,1

(a) Source: Istat, Movimento e calcolo della popolazione residente annuale (b) Source: Istat, Tavole di fecondità regionali (c) Source: Istat, Tavole di mortalità della popolazione italiana
(d) Source: Istat, Sistema di nowcast per indicatori demografici

A1.2 - Population

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Male												
[0-14]	4.415.133	4.270.998	4.285.775	4.246.786	4.125.036	3.846.632	3.567.047	3.406.203	3.336.225	3.289.175	3.207.907	3.073.928
[15-19]	1.885.064	1.585.118	1.475.278	1.469.408	1.414.802	1.474.877	1.431.777	1.295.882	1.199.847	1.154.771	1.136.384	1.130.424
[20-54]	14.368.182	14.632.861	14.437.923	14.181.892	13.797.719	13.094.126	12.334.541	11.633.835	11.086.842	10.717.896	10.409.893	10.091.908
[55-64]	3.274.556	3.290.160	3.439.528	3.586.172	3.679.453	4.095.420	4.506.666	4.561.539	4.211.541	3.679.526	3.322.516	3.221.648
[65-79]	3.068.062	3.497.392	3.728.669	3.843.465	4.094.456	4.244.499	4.546.859	4.960.171	5.483.955	5.760.945	5.546.661	5.011.185
[65+]	3.847.773	4.224.175	4.679.412	5.014.543	5.463.347	5.807.709	6.249.158	6.915.560	7.614.282	8.079.771	8.148.518	7.868.705
[80+]	779.711	726.783	950.743	1.171.078	1.368.891	1.563.210	1.702.299	1.955.389	2.130.327	2.318.826	2.601.857	2.857.520
total	27.790.708	28.003.312	28.317.916	28.498.801	28.480.357	28.318.764	28.089.189	27.813.019	27.448.737	26.921.139	26.225.218	25.386.613
Female												
[0-14]	4.205.367	4.038.308	4.044.525	4.003.271	3.886.612	3.624.606	3.360.839	3.209.002	3.142.863	3.098.426	3.021.823	2.895.600
[15-19]	1.811.274	1.508.437	1.397.695	1.390.795	1.336.464	1.390.662	1.350.463	1.222.023	1.131.256	1.088.638	1.071.222	1.065.564
[20-54]	14.338.614	14.453.130	14.188.126	13.867.116	13.430.901	12.690.990	11.903.646	11.180.453	10.626.781	10.259.424	9.957.361	9.646.088
[55-64]	3.569.316	3.530.395	3.637.793	3.754.350	3.810.081	4.185.230	4.554.483	4.575.126	4.195.701	3.637.685	3.264.344	3.155.262
[65-79]	4.040.740	4.607.913	4.720.411	4.751.288	4.940.469	5.030.278	5.292.168	5.643.318	6.133.926	6.395.316	6.132.749	5.517.040
[65+]	5.553.299	6.146.313	6.655.805	7.050.878	7.546.085	7.913.107	8.371.059	9.063.585	9.789.266	10.287.135	10.377.907	10.104.366
[80+]	1.512.559	1.538.400	1.935.394	2.299.590	2.605.616	2.882.829	3.078.891	3.420.267	3.655.340	3.891.819	4.245.158	4.587.326
total	29.477.870	29.676.583	29.923.944	30.066.410	30.010.143	29.804.595	29.540.490	29.250.189	28.885.867	28.371.308	27.692.657	26.866.880
Male and Female												
[0-14]	8.620.500	8.309.306	8.330.300	8.250.057	8.011.648	7.471.238	6.927.886	6.615.205	6.479.088	6.387.601	6.229.730	5.969.528
[15-19]	3.696.338	3.093.555	2.872.973	2.860.203	2.751.266	2.865.539	2.782.240	2.517.905	2.331.103	2.243.409	2.207.606	2.195.988
[20-54]	28.706.796	29.085.991	28.626.049	28.049.008	27.228.620	25.785.116	24.238.187	22.814.288	21.713.623	20.977.320	20.367.254	19.737.996
[55-64]	6.843.872	6.820.555	7.077.321	7.340.522	7.489.534	8.280.650	9.061.149	9.136.665	8.407.242	7.317.211	6.586.860	6.376.910
[65-79]	7.108.802	8.105.305	8.449.080	8.594.753	9.034.925	9.274.777	9.839.027	10.603.489	11.617.881	12.156.261	11.679.410	10.528.225
[65+]	9.401.072	10.370.488	11.335.217	12.065.421	13.009.432	13.720.816	14.620.217	15.979.145	17.403.548	18.366.906	18.526.425	17.973.071
[80+]	2.292.270	2.265.183	2.886.137	3.470.668	3.974.507	4.446.039	4.781.190	5.375.656	5.785.667	6.210.645	6.847.015	7.444.846
total	57.268.578	57.679.895	58.241.860	58.565.211	58.490.500	58.123.359	57.629.679	57.063.208	56.334.604	55.292.447	53.917.875	52.253.493

A1.3 - Demographic indicators

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Elderly dependency ratio (a)	26,4%	28,9%	31,7%	34,1%	37,5%	40,3%	43,9%	50,0%	57,8%	64,9%	68,7%	68,8%
Youth dependency ratio (b)	34,6%	31,8%	31,4%	31,4%	31,0%	30,3%	29,2%	28,6%	29,2%	30,5%	31,3%	31,3%
Total dependency ratio (c)	61,1%	60,6%	63,1%	65,5%	68,5%	70,6%	73,1%	78,6%	87,0%	95,4%	100,0%	100,1%
Ageing index (d)	76,3%	90,9%	101,2%	108,6%	120,9%	132,7%	150,6%	175,0%	197,5%	212,8%	219,6%	220,1%

(a) pop.[65+]/pop.[20-64] (b) pop.[0-19]/pop.[20-64] (c) (pop.[0-19]+pop.[65+])/pop.[20-64] (d) pop.[65+]/pop.[0-19]

A2 - National baseline scenario: macroeconomic assumption

A2.1 - Employment, labour productivity and GDP

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Participation rate (a)	39,9%	41,2%	42,1%	42,4%	41,9%	41,5%	40,8%	39,5%	38,2%	37,6%	37,3%	37,5%
Unemployment rate	11,6%	10,6%	8,8%	8,4%	8,2%	8,1%	7,7%	6,9%	6,0%	5,4%	4,9%	4,5%
Labour force (thousands)	22.664	23.575	24.538	24.823	24.518	24.096	23.512	22.541	21.505	20.800	20.126	19.569
Employment (thousands)	20.026	21.080	22.375	22.739	22.509	22.134	21.695	20.987	20.216	19.679	19.142	18.688
Employment rate (b)	51,5%	54,3%	58,1%	59,5%	60,2%	60,0%	60,3%	61,2%	62,6%	64,8%	65,9%	66,2%
GDP in real terms (mln € 2000)	1.061.551	1.164.767	1.265.767	1.372.761	1.468.735	1.573.841	1.694.816	1.810.193	1.925.136	2.069.104	2.222.076	2.395.242
GDP in nominal terms (mln €)	923.052	1.164.767	1.393.353	1.627.918	1.876.339	2.166.002	2.512.758	2.891.235	3.312.457	3.835.316	4.437.190	5.152.628
real GDP per capita (€ 2000) (c)	18.536	20.194	21.733	23.440	25.111	27.078	29.409	31.723	34.173	37.421	41.212	45.839
real GDP per worker (€ 2000)	53.009	55.255	56.570	60.371	65.251	71.105	78.122	86.253	95.230	105.142	116.085	128.167
nominal GDP per capita (€) (c)	16.118	20.194	23.924	27.797	32.079	37.266	43.602	50.667	58.800	69.364	82.295	98.608
nominal GDP per worker (€)	46.093	55.255	62.272	71.593	83.359	97.859	115.825	137.763	163.856	194.892	231.806	275.712
GDP deflator	87,0	100,0	110,1	118,6	127,8	137,6	148,3	159,7	172,1	185,4	199,7	215,1
CPI deflator (d)	89,2	100,0	110,2	118,7	127,9	137,8	148,4	159,9	172,2	185,5	199,9	215,3

(a) Labour force/total population (b) Employment levels/pop15-64 (c) Population registered at the 1st of January (d) Consumer Price Index for the family of employed (white and blue collar) without tobacco.

A2.2 - Participation rates by sex and age bracket

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Male												
[15-19]	21,8%	20,0%	19,0%	19,4%	19,2%	19,2%	19,5%	19,5%	19,4%	19,3%	19,3%	19,3%
[65+]	6,4%	5,8%	4,5%	4,4%	4,8%	4,8%	5,0%	5,0%	4,5%	4,1%	3,7%	3,4%
[15-64]	72,5%	73,6%	75,1%	76,1%	76,4%	75,7%	74,8%	73,9%	73,4%	74,3%	74,7%	74,6%
[20-54]	85,3%	86,3%	87,4%	87,6%	87,3%	86,8%	86,2%	86,0%	86,3%	86,6%	86,7%	86,6%
[55-64]	46,5%	42,7%	48,0%	53,8%	57,5%	60,8%	61,4%	58,4%	54,7%	55,6%	56,4%	56,6%
[20-64]	78,0%	78,3%	79,7%	80,7%	81,0%	80,5%	79,5%	78,2%	77,6%	78,7%	79,3%	79,3%
Female												
[15-19]	16,5%	14,9%	15,2%	15,3%	15,1%	15,1%	15,4%	15,4%	15,3%	15,2%	15,2%	15,2%
[65+]	1,8%	1,6%	1,2%	1,2%	1,4%	1,4%	1,5%	1,8%	1,9%	2,0%	2,0%	1,9%
[15-64]	42,3%	46,3%	50,7%	52,0%	52,5%	52,6%	53,1%	54,3%	56,3%	58,8%	60,0%	60,4%
[20-54]	52,7%	56,9%	61,1%	61,9%	62,3%	63,2%	64,2%	65,5%	66,7%	67,7%	68,8%	69,7%
[55-64]	14,1%	16,1%	23,6%	29,2%	31,5%	33,5%	35,5%	37,3%	40,7%	46,4%	47,7%	47,5%
[20-64]	45,0%	48,9%	53,4%	54,9%	55,4%	55,7%	56,2%	57,3%	59,4%	62,2%	63,6%	64,2%
Male and Female												
[15-19]	19,2%	17,5%	17,2%	17,4%	17,2%	17,2%	17,5%	17,5%	17,4%	17,3%	17,3%	17,3%
[65+]	3,7%	3,3%	2,5%	2,5%	2,9%	2,9%	3,0%	3,2%	3,0%	2,9%	2,7%	2,6%
[15-64]	57,4%	59,9%	62,9%	64,1%	64,5%	64,3%	64,1%	64,2%	65,0%	66,7%	67,5%	67,7%
[20-54]	69,0%	71,7%	74,4%	74,9%	75,0%	75,2%	75,4%	76,0%	76,7%	77,4%	78,0%	78,3%
[55-64]	29,6%	29,0%	35,4%	41,2%	44,3%	47,0%	48,4%	47,8%	47,7%	51,1%	52,1%	52,1%
[20-64]	61,4%	63,6%	66,6%	67,9%	68,3%	68,2%	68,0%	67,9%	68,6%	70,6%	71,6%	71,9%

A2.3 - Employment rates by age bracket

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[15-64]	50,6%	53,5%	57,3%	58,7%	59,2%	59,0%	59,1%	59,7%	61,0%	63,0%	64,1%	64,6%
[20-54]	61,1%	64,1%	67,8%	68,6%	68,7%	68,9%	69,4%	70,5%	71,9%	73,0%	74,0%	74,7%
[55-64]	28,5%	27,7%	33,9%	39,4%	42,4%	44,9%	46,3%	46,0%	46,1%	49,5%	50,6%	50,7%
[20-64]	54,8%	57,2%	61,1%	62,5%	63,0%	63,0%	63,1%	63,5%	64,7%	67,0%	68,3%	68,8%

A3 - National baseline scenario: pension expenditure

A3.1 - Total pension expenditure/GDP and its decomposition

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Total pension expenditure/GDP	13,4%	13,8%	14,3%	14,6%	15,1%	15,3%	15,5%	15,9%	15,9%	15,2%	14,4%	13,6%
Average pension/(GDP per worker)	15,1%	15,7%	16,8%	16,9%	16,7%	16,1%	15,3%	14,4%	13,5%	12,5%	11,7%	11,0%
Number of pensions/workers	88,5%	87,8%	84,7%	86,7%	90,4%	94,4%	100,8%	110,4%	118,5%	121,7%	123,5%	123,4%

A3.2 - Pension expenditure (2000 prices)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Total pension expenditure (mln €)	**138.233**	**160.582**	**180.284**	**200.681**	**221.517**	**239.805**	**261.943**	**287.500**	**306.443**	**314.265**	**320.221**	**324.427**
Public pensions	136.280	158.305	176.872	196.765	216.726	234.319	255.603	280.030	297.958	304.985	310.663	314.910
Direct pensions	111.745	130.185	146.156	163.628	181.232	196.556	215.731	238.333	254.839	260.722	265.440	268.843
for private sector employees	70.295	79.886	89.519	98.495	108.313	117.838	131.555	148.948	163.505	168.841	173.252	175.976
for public sector employees	24.903	31.561	35.131	40.580	46.032	50.543	54.952	59.429	61.661	63.019	63.465	63.985
for self-employed	16.548	18.738	21.507	24.554	26.887	28.175	29.225	29.956	29.673	28.862	28.724	28.882
Survivors and child pensions	24.534	28.120	30.716	33.136	35.494	37.762	39.872	41.697	43.119	44.262	45.222	46.067
for private sector employees		18.353	19.386	20.794	22.186	23.551	24.894	26.170	27.314	28.383	29.377	30.310
for public sector employees		6.638	7.030	7.394	7.667	7.868	8.057	8.258	8.478	8.687	8.821	8.844
for self-employed		3.128	4.300	4.948	5.641	6.343	6.921	7.268	7.327	7.193	7.024	6.912
Old age means-tested transfers (a) (b)	1.953	2.277	3.412	3.916	4.792	5.486	6.340	7.471	8.485	9.280	9.558	9.517

(a) Social pensions and old age allowances starting from 1996. *(b) Net of reimbursements of pensions (or part of their amount) unduly paid.*

A3.3 - Number of pensions (thousands)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Number of pensions (thousands)	**17.723**	**18.510**	**18.948**	**19.718**	**20.341**	**20.905**	**21.875**	**23.166**	**23.948**	**23.940**	**23.638**	**23.054**
Public pensions	17.005	17.801	18.184	18.882	19.366	19.844	20.713	21.866	22.544	22.489	22.233	21.736
Direct pensions	12.623	13.179	13.347	13.876	14.281	14.749	15.650	16.859	17.613	17.628	17.416	16.938
for private sector employees	8.016	7.844	7.772	7.927	8.096	8.409	9.105	10.087	10.881	11.069	11.045	10.784
for public sector employees	1.505	1.828	1.938	2.173	2.403	2.604	2.821	3.060	3.155	3.180	3.143	3.075
for self-employed	3.103	3.507	3.638	3.775	3.782	3.736	3.724	3.711	3.577	3.379	3.228	3.080
Survivors and child pensions	4.382	4.622	4.837	5.006	5.085	5.095	5.063	5.007	4.931	4.861	4.817	4.798
for private sector employees		3.031	3.096	3.166	3.169	3.125	3.070	3.024	2.994	2.985	2.994	3.011
for public sector employees		565	620	655	678	693	704	713	720	724	723	719
for self-employed		1.026	1.121	1.186	1.239	1.277	1.289	1.270	1.218	1.152	1.100	1.068
Old age means-tested transfers (a)	718	709	764	835	975	1.061	1.162	1.300	1.404	1.451	1.405	1.318

(a) Social pensions and old age allowances starting from 1996.

A3.4 - Average pension (2000 prices)

	1995	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Average pension (euro)	**7.800**	**8.675**	**9.515**	**10.178**	**10.890**	**11.471**	**11.974**	**12.410**	**12.796**	**13.127**	**13.547**	**14.073**
Public pensions	8.014	8.893	9.727	10.421	11.191	11.808	12.340	12.807	13.217	13.561	13.973	14.488
Direct pensions	8.852	9.878	10.951	11.792	12.691	13.327	13.785	14.137	14.469	14.790	15.242	15.872
for private sector employees	8.770	10.184	11.518	12.425	13.379	14.014	14.449	14.766	15.026	15.253	15.686	16.318
for public sector employees	16.548	17.267	18.130	18.670	19.159	19.408	19.481	19.419	19.546	19.815	20.195	20.811
for self-employed	5.333	5.343	5.912	6.504	7.108	7.541	7.847	8.072	8.296	8.543	8.898	9.378
Survivors and child pensions	5.599	6.084	6.350	6.619	6.980	7.412	7.875	8.328	8.744	9.106	9.387	9.601
for private sector employees		6.055	6.261	6.569	7.001	7.536	8.108	8.654	9.124	9.509	9.811	10.065
for public sector employees		11.756	11.337	11.286	11.315	11.356	11.444	11.581	11.776	12.002	12.195	12.299
for self-employed		3.050	3.836	4.174	4.554	4.969	5.370	5.725	6.016	6.241	6.387	6.475
Old age means-tested transfers (a)	2.722	3.211	4.464	4.688	4.916	5.171	5.454	5.745	6.045	6.395	6.802	7.223

(a) Social pensions and old age allowances starting from 1996.

A4 -National baseline scenario: health care expenditure as a share of GDP - CPS linked to GDP per capita

A4.1 - Acute e long term care

	1995 (a)	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,2%	3,3%	3,4%	3,4%	3,4%	3,4%	3,4%	3,3%	3,1%	3,0%	2,9%	2,9%
[65-79]	1,4%	1,8%	1,9%	1,9%	2,0%	2,1%	2,2%	2,4%	2,7%	2,9%	2,9%	2,7%
[80+]	0,6%	0,6%	0,8%	1,0%	1,1%	1,3%	1,4%	1,6%	1,7%	1,9%	2,1%	2,4%
Total	**5,2%**	**5,7%**	**6,2%**	**6,3%**	**6,5%**	**6,7%**	**7,0%**	**7,3%**	**7,5%**	**7,8%**	**7,9%**	**8,0%**

A4.2 - Acute care

	1995 (a)	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	2,9%	3,0%	3,2%	3,1%	3,1%	3,1%	3,1%	3,0%	2,9%	2,8%	2,7%	2,7%
[65-79]	1,2%	1,6%	1,7%	1,7%	1,8%	1,8%	2,0%	2,1%	2,4%	2,5%	2,5%	2,4%
[80+]	0,5%	0,5%	0,6%	0,8%	0,9%	1,0%	1,0%	1,2%	1,3%	1,4%	1,6%	1,8%
Total	**4,6%**	**5,1%**	**5,4%**	**5,6%**	**5,7%**	**5,9%**	**6,1%**	**6,3%**	**6,5%**	**6,7%**	**6,8%**	**6,8%**

A4.3 - Long term care

	1995 (a)	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,2%	0,2%	0,2%	0,2%
[65-79]	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,3%	0,3%	0,3%	0,3%	0,4%	0,3%
[80+]	0,1%	0,2%	0,2%	0,2%	0,3%	0,3%	0,4%	0,4%	0,4%	0,5%	0,5%	0,6%
Total	**0,6%**	**0,6%**	**0,7%**	**0,8%**	**0,8%**	**0,8%**	**0,9%**	**0,9%**	**1,0%**	**1,1%**	**1,1%**	**1,2%**

A5 - National baseline scenario: health care expenditure as a share of GDP - CPS linked to GDP per worker

A5.1 - Acute e long term care

	1995 (a)	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,2%	3,3%	3,4%	3,4%	3,4%	3,4%	3,5%	3,5%	3,4%	3,2%	3,2%	3,1%
[65-79]	1,4%	1,8%	1,9%	1,9%	2,0%	2,1%	2,3%	2,5%	2,9%	3,1%	3,2%	2,9%
[80+]	0,6%	0,6%	0,8%	1,0%	1,1%	1,3%	1,4%	1,7%	1,9%	2,0%	2,3%	2,6%
Total	**5,2%**	**5,7%**	**6,2%**	**6,3%**	**6,6%**	**6,9%**	**7,2%**	**7,6%**	**8,1%**	**8,4%**	**8,6%**	**8,6%**

A5.2 - Acute care

	1995 (a)	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	2,9%	3,0%	3,2%	3,1%	3,1%	3,2%	3,2%	3,2%	3,1%	3,0%	2,9%	2,9%
[65-79]	1,2%	1,6%	1,7%	1,7%	1,8%	1,9%	2,0%	2,2%	2,5%	2,8%	2,8%	2,6%
[80+]	0,5%	0,5%	0,6%	0,8%	0,9%	1,0%	1,1%	1,2%	1,4%	1,5%	1,7%	1,9%
Total	**4,6%**	**5,1%**	**5,4%**	**5,6%**	**5,8%**	**6,0%**	**6,3%**	**6,7%**	**7,1%**	**7,3%**	**7,4%**	**7,4%**

A5.3 - Long term care

	1995 (a)	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,2%	0,2%
[65-79]	0,2%	0,2%	0,2%	0,2%	0,2%	0,3%	0,3%	0,3%	0,3%	0,4%	0,4%	0,4%
[80+]	0,1%	0,2%	0,2%	0,2%	0,3%	0,3%	0,4%	0,4%	0,5%	0,5%	0,6%	0,6%
Total	**0,6%**	**0,6%**	**0,7%**	**0,7%**	**0,8%**	**0,8%**	**0,9%**	**1,0%**	**1,1%**	**1,1%**	**1,2%**	**1,3%**

(a) The values of 1995 have been calculated distributing by age bracket, sex and macro-level (acute and long term care) the total health care expenditure in 1995, on the basis of the corresponding expenditure profiles estimated for the year 1999.

B1 - National programmatic scenario: demographic assumption (Istat main variant)

B1.1 - Demographic parameters

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Migration flows (thousands)	111.867	113.290	114.945	116.479	117.711	118.690	119.727	120.985	122.364	123.714
Fertilitity rate (children per women)	1,38	1,40	1,41	1,41	1,41	1,41	1,41	1,41	1,41	1,41
Life expectancy (male)	77,1	77,9	78,7	79,6	80,5	81,4	81,4	81,4	81,4	81,4
Life expectancy (female)	83,5	84,4	85,3	86,2	87,2	88,1	88,1	88,1	88,1	88,1

B1.2 - Population

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Male										
[0-14]	4.285.775	4.246.786	4.125.036	3.846.632	3.567.047	3.406.203	3.336.225	3.289.175	3.207.907	3.073.928
[15-19]	1.475.278	1.469.408	1.414.802	1.474.877	1.431.777	1.295.882	1.199.847	1.154.771	1.136.384	1.130.424
[20-54]	14.437.923	14.181.892	13.797.719	13.094.126	12.334.541	11.633.835	11.086.842	10.717.896	10.409.893	10.091.908
[55-64]	3.439.528	3.586.172	3.679.453	4.095.420	4.506.666	4.561.539	4.211.541	3.679.526	3.322.516	3.221.648
[65-79]	3.728.669	3.843.465	4.094.456	4.244.499	4.546.859	4.960.171	5.483.955	5.760.945	5.546.661	5.011.185
[65+]	4.679.412	5.014.543	5.463.347	5.807.709	6.249.158	6.915.560	7.614.282	8.079.771	8.148.518	7.868.705
[80+]	950.743	1.171.078	1.368.891	1.563.210	1.702.299	1.955.389	2.130.327	2.318.826	2.601.857	2.857.520
total	28.317.916	28.498.801	28.480.357	28.318.764	28.089.189	27.813.019	27.448.737	26.921.139	26.225.218	25.386.613
Female										
[0-14]	4.044.525	4.003.271	3.886.612	3.624.606	3.360.839	3.209.002	3.142.863	3.098.426	3.021.823	2.895.600
[15-19]	1.397.695	1.390.795	1.336.464	1.390.662	1.350.463	1.222.023	1.131.256	1.088.638	1.071.222	1.065.564
[20-54]	14.188.126	13.867.116	13.430.901	12.690.990	11.903.646	11.180.453	10.626.781	10.259.424	9.957.361	9.646.088
[55-64]	3.637.793	3.754.350	3.810.081	4.185.230	4.554.483	4.575.126	4.195.701	3.637.685	3.264.344	3.155.262
[65-79]	4.720.411	4.751.288	4.940.469	5.030.278	5.292.168	5.643.318	6.133.926	6.395.316	6.132.749	5.517.040
[65+]	6.655.805	7.050.878	7.546.085	7.913.107	8.371.059	9.063.585	9.789.266	10.287.135	10.377.907	10.104.366
[80+]	1.935.394	2.299.590	2.605.616	2.882.829	3.078.891	3.420.267	3.655.340	3.891.819	4.245.158	4.587.326
total	29.923.944	30.066.410	30.010.143	29.804.595	29.540.490	29.250.189	28.885.867	28.371.308	27.692.657	26.866.880
Male and Female										
[0-14]	8.330.300	8.250.057	8.011.648	7.471.238	6.927.886	6.615.205	6.479.088	6.387.601	6.229.730	5.969.528
[15-19]	2.872.973	2.860.203	2.751.266	2.865.539	2.782.240	2.517.905	2.331.103	2.243.409	2.207.606	2.195.988
[20-54]	28.626.049	28.049.008	27.228.620	25.785.116	24.238.187	22.814.288	21.713.623	20.977.320	20.367.254	19.737.996
[55-64]	7.077.321	7.340.522	7.489.534	8.280.650	9.061.149	9.136.665	8.407.242	7.317.211	6.586.860	6.376.910
[65-79]	8.449.080	8.594.753	9.034.925	9.274.777	9.839.027	10.603.489	11.617.881	12.156.261	11.679.410	10.528.225
[65+]	11.335.217	12.065.421	13.009.432	13.720.816	14.620.217	15.979.145	17.403.548	18.366.906	18.526.425	17.973.071
[80+]	2.886.137	3.470.668	3.974.507	4.446.039	4.781.190	5.375.656	5.785.667	6.210.645	6.847.015	7.444.846
total	58.241.860	58.565.211	58.490.500	58.123.359	57.629.679	57.063.208	56.334.604	55.292.447	53.917.875	52.253.493

B1.3 - Demographic indicators

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Elderly dependency ratio (a)	31,7%	34,1%	37,5%	40,3%	43,9%	50,0%	57,8%	64,9%	68,7%	68,8%
Youth dependency ratio (b)	31,4%	31,4%	31,0%	30,3%	29,2%	28,6%	29,2%	30,5%	31,3%	31,3%
Total dependency ratio (c)	63,1%	65,5%	68,5%	70,6%	73,1%	78,6%	87,0%	95,4%	100,0%	100,1%
Ageing index (d)	101,2%	108,6%	120,9%	132,7%	150,6%	175,0%	197,5%	212,8%	219,6%	220,1%

(a) pop.[65+]/pop.[20-64] (b) pop.[0-19]/pop.[20-64] (c) (pop.[0-19]+pop.[65+])/pop.[20-64] (d) pop.[65+]/pop.[0-19]

B2 - National programmatic scenario: macroeconomic assumption

B2.1 - Employment, labour productivity and GDP

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Participation rate (a)	42,3%	42,6%	42,0%	41,5%	40,8%	39,5%	38,2%	37,6%	37,3%	37,4%
Unemployment rate	7,5%	6,7%	6,5%	6,4%	6,3%	5,8%	5,4%	5,0%	4,7%	4,5%
Labour force (thousands)	24.660	24.929	24.571	24.106	23.522	22.548	21.497	20.772	20.085	19.524
Employment (thousands)	22.810	23.270	22.978	22.551	22.050	21.232	20.347	19.735	19.138	18.646
Employment rate (b)	59,2%	60,9%	61,4%	61,2%	61,3%	61,9%	63,0%	65,0%	65,9%	66,1%
GDP in real terms (mln € 2000)	1.291.757	1.410.538	1.505.388	1.610.019	1.729.609	1.838.707	1.945.501	2.083.358	2.230.592	2.399.479
GDP in nominal terms (mln €)	1.431.191	1.687.950	1.940.678	2.235.972	2.587.697	2.963.522	3.377.981	3.896.907	4.494.760	5.208.750
real GDP per capita (€ 2000) (c)	22.179	24.085	25.737	27.700	30.012	32.222	34.535	37.679	41.370	45.920
real GDP per worker (€ 2000)	56.630	60.616	65.515	71.394	78.439	86.602	95.616	105.568	116.556	128.687
nominal GDP per capita (€) (c)	24.573	28.822	33.179	38.469	44.902	51.934	59.963	70.478	83.363	99.682
nominal GDP per worker (€)	62.743	72.537	84.459	99.150	117.353	139.581	166.019	197.464	234.866	279.351
GDP deflator	110,8	119,7	128,9	138,9	149,6	161,2	173,6	187,0	201,5	217,1
CPI deflator (d)	109,6	117,8	126,9	136,7	147,2	158,6	170,9	184,1	198,3	213,6

(a) Labour force/total population (b) Employment levels/pop15-64 (c) Population registered at the 1st of January (d) Consumer Price Index for the family of employed (white and blue collar) without tobacco.

B2.2 - Participation rates by sex and age bracket

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Male										
[15-19]	19,1%	19,4%	19,2%	19,2%	19,5%	19,5%	19,4%	19,3%	19,3%	19,3%
[65+]	4,6%	4,5%	4,9%	4,8%	5,0%	5,0%	4,5%	4,1%	3,6%	3,4%
[15-64]	75,3%	76,2%	76,4%	75,7%	74,9%	73,9%	73,3%	74,2%	74,6%	74,5%
[20-54]	87,5%	87,8%	87,4%	86,8%	86,2%	86,0%	86,3%	86,6%	86,7%	86,6%
[55-64]	48,5%	54,0%	57,5%	60,8%	61,4%	58,3%	54,6%	55,3%	55,9%	56,1%
[20-64]	79,7%	80,7%	81,0%	80,5%	79,5%	78,2%	77,6%	78,7%	79,3%	79,3%
Female										
[15-19]	15,3%	15,3%	15,1%	15,1%	15,4%	15,4%	15,3%	15,2%	15,2%	15,2%
[65+]	1,2%	1,3%	1,5%	1,4%	1,5%	1,8%	1,9%	2,0%	1,9%	1,8%
[15-64]	51,1%	52,4%	52,7%	52,7%	53,2%	54,3%	56,2%	58,7%	59,8%	60,3%
[20-54]	61,5%	62,3%	62,5%	63,2%	64,2%	65,5%	66,7%	67,7%	68,8%	69,7%
[55-64]	24,3%	29,5%	31,7%	33,5%	35,7%	37,4%	40,6%	46,1%	47,1%	46,9%
[20-64]	53,4%	54,9%	55,4%	55,7%	56,2%	57,3%	59,4%	62,2%	63,6%	64,2%
Male and Female										
[15-19]	17,3%	17,4%	17,2%	17,2%	17,5%	17,5%	17,4%	17,3%	17,3%	17,3%
[65+]	2,6%	2,6%	2,9%	2,9%	3,0%	3,2%	3,0%	2,9%	2,7%	2,5%
[15-64]	63,2%	64,4%	64,7%	64,3%	64,2%	64,2%	64,9%	66,6%	67,4%	67,5%
[20-54]	74,6%	75,2%	75,1%	75,2%	75,4%	76,0%	76,7%	77,4%	78,0%	78,3%
[55-64]	36,1%	41,5%	44,4%	47,0%	48,5%	47,9%	47,6%	50,7%	51,6%	51,5%
[20-64]	66,6%	67,9%	68,3%	68,2%	68,0%	67,9%	68,6%	70,6%	71,6%	71,9%

A2.3 - Employment rates by age bracket

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[15-64]	58,4%	60,0%	60,4%	60,1%	60,1%	60,4%	61,4%	63,2%	64,1%	64,4%
[20-54]	69,0%	70,2%	70,2%	70,3%	70,5%	71,3%	72,4%	73,3%	74,1%	74,7%
[55-64]	34,7%	40,0%	42,8%	45,4%	46,9%	46,4%	46,2%	49,3%	50,2%	50,2%
[20-64]	62,2%	63,9%	64,2%	64,1%	64,0%	64,1%	65,1%	67,1%	68,3%	68,7%

B3 - National programmatic scenario: pension expenditure

B3.1 - Total pension expenditure/GDP and its decomposition

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Total pension expenditure/GDP	13,9%	14,0%	14,5%	14,7%	15,0%	15,5%	15,7%	15,0%	14,3%	13,5%
Average pension/(GDP per worker)	16,7%	16,5%	16,4%	15,9%	15,1%	14,2%	13,2%	12,3%	11,5%	10,8%
Number of pensions/workers	83,1%	84,7%	88,6%	92,8%	99,4%	109,6%	118,5%	122,4%	124,8%	124,9%

B3.2 - Pension expenditure (2000 prices)

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Total pension expenditure (mln €)	**180.819**	**200.895**	**222.006**	**240.775**	**263.643**	**290.189**	**309.904**	**318.251**	**324.311**	**328.104**
Public pensions	177.397	196.983	217.229	235.312	257.338	282.778	301.520	309.111	314.921	318.772
Direct pensions	146.590	163.838	181.723	197.530	217.422	241.007	258.291	264.690	269.496	272.475
for private sector employees	89.785	98.616	108.613	118.443	132.590	150.517	165.532	171.256	176.004	178.830
for public sector employees	35.234	40.633	46.165	50.814	55.453	60.302	62.764	64.200	64.400	64.459
for self-employed	21.571	24.589	26.945	28.273	29.379	30.189	29.996	29.235	29.092	29.187
Survivors and child pensions	30.807	33.145	35.506	37.782	39.916	41.771	43.229	44.420	45.425	46.297
for private sector employees	19.444	20.799	22.190	23.557	24.913	26.206	27.369	28.463	29.485	30.442
for public sector employees	7.051	7.397	7.675	7.883	8.082	8.298	8.535	8.765	8.917	8.946
for self-employed	4.312	4.949	5.641	6.342	6.920	7.267	7.326	7.192	7.023	6.909
Old age means-tested transfers (a) (b)	3.422	3.912	4.777	5.463	6.305	7.411	8.384	9.140	9.391	9.332

(a) Social pensions and old age allowances starting from 1996. (b) Net of reimbursements of pensions (or part of their amount) unduly paid.

B3.3 - Number of pensions (thousands)

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Number of pensions (thousands)	**18.948**	**19.720**	**20.347**	**20.921**	**21.918**	**23.267**	**24.107**	**24.150**	**23.875**	**23.292**
Public pensions	18.184	18.885	19.373	19.860	20.755	21.967	22.704	22.698	22.470	21.974
Direct pensions	13.347	13.878	14.286	14.762	15.687	16.952	17.761	17.822	17.631	17.150
for private sector employees	7.772	7.928	8.099	8.416	9.123	10.132	10.958	11.180	11.187	10.942
for public sector employees	1.938	2.174	2.404	2.608	2.836	3.094	3.199	3.226	3.177	3.091
for self-employed	3.638	3.776	3.784	3.738	3.729	3.725	3.605	3.415	3.267	3.116
Survivors and child pensions	4.837	5.007	5.087	5.098	5.068	5.014	4.942	4.877	4.838	4.825
for private sector employees	3.096	3.166	3.170	3.127	3.073	3.028	2.999	2.993	3.006	3.027
for public sector employees	620	655	678	694	705	715	723	728	728	725
for self-employed	1.121	1.186	1.239	1.277	1.290	1.271	1.220	1.156	1.104	1.073
Old age means-tested transfers (a)	764	835	975	1.061	1.162	1.300	1.404	1.451	1.405	1.318

(a) Social pensions and old age allowances starting from 1996.

B3.4 - Average pension (2000 prices)

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Average pension (euro)	**9.543**	**10.187**	**10.911**	**11.509**	**12.029**	**12.472**	**12.855**	**13.178**	**13.584**	**14.087**
Public pensions	9.756	10.431	11.213	11.849	12.399	12.873	13.281	13.618	14.015	14.507
Direct pensions	10.983	11.806	12.720	13.381	13.860	14.217	14.542	14.852	15.285	15.888
for private sector employees	11.553	12.439	13.411	14.074	14.533	14.855	15.106	15.318	15.733	16.343
for public sector employees	18.184	18.691	19.205	19.483	19.556	19.488	19.622	19.900	20.271	20.851
for self-employed	5.930	6.513	7.122	7.563	7.879	8.103	8.322	8.560	8.903	9.367
Survivors and child pensions	6.369	6.620	6.980	7.412	7.876	8.330	8.746	9.109	9.389	9.596
for private sector employees	6.280	6.570	7.001	7.534	8.107	8.654	9.124	9.509	9.808	10.056
for public sector employees	11.371	11.288	11.319	11.365	11.459	11.604	11.808	12.044	12.242	12.346
for self-employed	3.848	4.174	4.553	4.966	5.365	5.717	6.004	6.224	6.363	6.441
Old age means-tested transfers (a)	4.477	4.682	4.901	5.149	5.425	5.699	5.972	6.298	6.682	7.082

(a) Social pensions and old age allowances starting from 1996.

B4 - National programmatic scenario: health care expenditure as a share of GDP - CPS linked to GDP per capita

B4.1 - Acute e long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,4%	3,3%	3,3%	3,3%	3,3%	3,2%	3,1%	2,9%	2,8%	2,8%
[65-79]	1,8%	1,9%	2,0%	2,0%	2,2%	2,3%	2,6%	2,8%	2,8%	2,6%
[80+]	0,8%	1,0%	1,1%	1,3%	1,4%	1,5%	1,7%	1,8%	2,1%	2,3%
Total	**6,0%**	**6,2%**	**6,4%**	**6,6%**	**6,8%**	**7,1%**	**7,4%**	**7,6%**	**7,7%**	**7,8%**

B4.2 - Acute care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,1%	3,1%	3,0%	3,0%	3,0%	3,0%	2,8%	2,7%	2,6%	2,6%
[65-79]	1,6%	1,6%	1,7%	1,8%	1,9%	2,1%	2,3%	2,5%	2,5%	2,3%
[80+]	0,6%	0,7%	0,8%	0,9%	1,0%	1,2%	1,3%	1,4%	1,6%	1,7%
Total	**5,3%**	**5,4%**	**5,6%**	**5,8%**	**6,0%**	**6,2%**	**6,4%**	**6,5%**	**6,6%**	**6,7%**

B4.3 - Long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	0,3%	0,3%	0,3%	0,3%	0,3%	0,2%	0,2%	0,2%	0,2%	0,2%
[65-79]	0,2%	0,2%	0,2%	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
[80+]	0,2%	0,2%	0,3%	0,3%	0,3%	0,4%	0,4%	0,5%	0,5%	0,6%
Total	**0,7%**	**0,7%**	**0,8%**	**0,8%**	**0,9%**	**0,9%**	**1,0%**	**1,0%**	**1,1%**	**1,1%**

B5 - National programmatic scenario: health care expenditure as a share of GDP - CPS linked to GDP per worker

B5.1 - Acute e long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,4%	3,3%	3,3%	3,4%	3,4%	3,4%	3,4%	3,2%	3,2%	3,1%
[65-79]	1,8%	1,9%	2,0%	2,1%	2,3%	2,5%	2,9%	3,1%	3,2%	2,9%
[80+]	0,8%	1,0%	1,1%	1,3%	1,4%	1,6%	1,8%	2,0%	2,3%	2,6%
Total	**6,0%**	**6,2%**	**6,4%**	**6,7%**	**7,1%**	**7,6%**	**8,1%**	**8,4%**	**8,6%**	**8,7%**

B5.2 - Acute care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,1%	3,1%	3,1%	3,1%	3,2%	3,2%	3,1%	3,0%	2,9%	2,9%
[65-79]	1,6%	1,6%	1,7%	1,8%	2,0%	2,2%	2,5%	2,8%	2,8%	2,6%
[80+]	0,6%	0,7%	0,8%	1,0%	1,1%	1,2%	1,4%	1,5%	1,7%	1,9%
Total	**5,3%**	**5,4%**	**5,7%**	**5,9%**	**6,2%**	**6,6%**	**7,0%**	**7,3%**	**7,4%**	**7,4%**

B5.3 - Long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,2%	0,2%
[65-79]	0,2%	0,2%	0,2%	0,2%	0,3%	0,3%	0,3%	0,4%	0,4%	0,4%
[80+]	0,2%	0,2%	0,3%	0,3%	0,4%	0,4%	0,5%	0,5%	0,6%	0,6%
Total	**0,7%**	**0,7%**	**0,8%**	**0,8%**	**0,9%**	**1,0%**	**1,1%**	**1,1%**	**1,2%**	**1,3%**

C1 - EPC-WGA baseline scenario: demographic assumption (Eurostat main variant)

C1.1 - Demographic parameters

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Migration flows (thousands)	65.000	80.000	80.000	80.000	80.000	80.000	80.000	80.000	80.000	80.000
Fertilitity rate (children per women)	1,3	1,4	1,4	1,4	1,5	1,5	1,5	1,5	1,5	1,5
Life expectancy (male)	76,5	77,4	78,3	79,0	79,6	80,1	80,4	80,7	80,9	81,0
Life expectancy (female)	82,7	83,4	84,0	84,5	85,0	85,3	85,6	85,8	85,9	86,0

C1.2 - Population

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Male										
[0-14]	4.152.152	3.999.173	3.810.145	3.570.908	3.373.568	3.271.972	3.223.378	3.164.414	3.062.768	2.931.694
[15-19]	1.473.356	1.465.868	1.401.669	1.384.750	1.319.044	1.213.736	1.146.474	1.122.400	1.112.548	1.098.140
[20-54]	14.291.734	13.954.432	13.506.153	12.735.766	11.853.910	11.034.894	10.419.439	10.011.856	9.675.056	9.332.485
[55-64]	3.408.116	3.539.774	3.617.414	4.011.037	4.380.730	4.376.721	3.979.151	3.433.147	3.089.312	3.002.003
[65-79]	3.703.116	3.803.134	4.041.016	4.176.220	4.451.349	4.820.479	5.286.950	5.513.718	5.258.736	4.705.806
[65+]	4.615.577	4.920.952	5.337.486	5.639.233	6.010.028	6.572.368	7.158.566	7.543.621	7.558.809	7.241.166
[80+]	912.461	1.117.818	1.296.470	1.463.013	1.558.679	1.751.889	1.871.616	2.029.903	2.300.073	2.535.360
total	27.940.935	27.880.199	27.672.867	27.341.694	26.937.280	26.469.691	25.927.008	25.275.438	24.498.493	23.605.488
Female										
[0-14]	3.939.809	3.804.933	3.635.068	3.405.824	3.216.930	3.119.597	3.072.961	3.016.487	2.919.319	2.794.102
[15-19]	1.397.333	1.387.995	1.326.565	1.321.531	1.258.171	1.157.200	1.092.718	1.069.565	1.060.043	1.046.198
[20-54]	14.024.589	13.608.613	13.087.128	12.259.933	11.342.171	10.496.298	9.879.894	9.482.654	9.161.333	8.837.089
[55-64]	3.623.182	3.735.180	3.783.443	4.143.977	4.482.524	4.446.924	3.999.238	3.402.086	3.030.634	2.929.993
[65-79]	4.703.331	4.718.160	4.890.529	4.961.928	5.199.552	5.514.796	5.954.541	6.150.868	5.812.593	5.142.832
[65+]	6.545.945	6.859.815	7.256.317	7.511.692	7.832.328	8.352.886	8.911.920	9.274.039	9.243.758	8.859.123
[80+]	1.842.614	2.141.655	2.365.788	2.549.764	2.632.776	2.838.090	2.957.379	3.123.171	3.431.165	3.716.291
total	29.530.858	29.396.536	29.088.521	28.642.957	28.132.124	27.572.905	26.956.731	26.244.831	25.415.087	24.466.505
Male and Female										
[0-14]	8.091.961	7.804.106	7.445.213	6.976.732	6.590.498	6.391.569	6.296.339	6.180.901	5.982.087	5.725.796
[15-19]	2.870.689	2.853.863	2.728.234	2.706.281	2.577.215	2.370.936	2.239.192	2.191.965	2.172.591	2.144.338
[20-54]	28.316.323	27.563.045	26.593.281	24.995.699	23.196.081	21.531.192	20.299.333	19.494.510	18.836.389	18.169.574
[55-64]	7.031.298	7.274.954	7.400.857	8.155.014	8.863.254	8.823.645	7.978.389	6.835.233	6.119.946	5.931.996
[65-79]	8.406.447	8.521.294	8.931.545	9.138.148	9.650.901	10.335.275	11.241.491	11.664.586	11.071.329	9.848.638
[65+]	11.161.522	11.780.767	12.593.803	13.150.925	13.842.356	14.925.254	16.070.486	16.817.660	16.802.567	16.100.289
[80+]	2.755.075	3.259.473	3.662.258	4.012.777	4.191.455	4.589.979	4.828.995	5.153.074	5.731.238	6.251.651
total	57.471.793	57.276.735	56.761.388	55.984.651	55.069.404	54.042.596	52.883.739	51.520.269	49.913.580	48.071.993

C1.3 - Demographic indicators

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Elderly dependency ratio (a)	31,6%	33,8%	37,0%	39,7%	43,2%	49,2%	56,8%	63,9%	67,3%	66,8%
Youth dependency ratio (b)	31,0%	30,6%	29,9%	29,2%	28,6%	28,9%	30,2%	31,8%	32,7%	32,7%
Total dependency ratio (c)	62,6%	64,4%	67,0%	68,9%	71,8%	78,0%	87,0%	95,7%	100,0%	99,5%
Ageing index (d)	101,8%	110,5%	123,8%	135,8%	151,0%	170,3%	188,3%	200,9%	206,0%	204,6%

(a) pop.[65+]/pop.[20-64] (b) pop.[0-19]/pop.[20-64] (c) (pop.[0-19]+pop.[65+])/pop.[20-64] (d) pop.[65+]/pop.[0-19]

C2 - EPC-WGA baseline scenario: macroeconomic assumption

C2.1 - Employment, labour productivity and GDP

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Participation rate (a)	42,5%	42,8%	42,4%	42,2%	41,8%	40,6%	39,3%	38,7%	38,4%	38,7%
Unemployment rate	9,3%	8,9%	8,6%	8,4%	8,2%	7,9%	7,6%	7,3%	7,1%	7,0%
Labour force (thousands)	24.402	24.511	24.072	23.614	23.027	21.963	20.796	19.927	19.159	18.599
Employment (thousands)	22.123	22.334	22.010	21.638	21.139	20.227	19.220	18.468	17.793	17.297
Employment rate (b)	58,0%	59,3%	60,1%	60,5%	61,3%	62,2%	63,3%	65,1%	65,8%	66,1%
GDP in real terms (mln € 2000)	1.283.461	1.423.551	1.530.025	1.640.457	1.747.878	1.823.955	1.890.278	1.980.888	2.081.354	2.206.703
GDP in nominal terms (mln €)	1.430.993	1.752.382	2.079.482	2.461.627	2.895.805	3.336.362	3.817.560	4.416.933	5.123.984	5.998.002
real GDP per capita (€ 2000) (c)	22.332	24.854	26.955	29.302	31.740	33.750	35.744	38.449	41.699	45.904
real GDP per worker (€ 2000)	58.014	63.739	69.514	75.814	82.683	90.176	98.347	107.259	116.979	127.579
nominal GDP per capita (€) (c)	24.899	30.595	36.635	43.970	52.585	61.736	72.188	85.732	102.657	124.771
nominal GDP per worker (€)	64.682	78.462	94.478	113.764	136.986	164.949	198.620	239.164	287.984	346.770
GDP deflator	111,5	123,1	135,9	150,1	165,7	182,9	202,0	223,0	246,2	271,8
CPI deflator (d)	111,6	123,2	136,0	150,2	165,8	183,1	202,2	223,2	246,4	272,1

(a) Labour force/total population (b) Employment levels/pop15-64 (c) Population registered at the 1st of January (d) Consumer Price Index for the family of employed (white and blue collar) without tobacco.

C2.2 - Participation rates by sex and age bracket

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Male										
[15-19]	19,0%	19,5%	19,3%	19,3%	19,5%	19,5%	19,4%	19,3%	19,3%	19,4%
[65+]	4,6%	4,5%	4,9%	4,9%	5,2%	5,3%	4,9%	4,4%	3,8%	3,5%
[15-64]	75,3%	76,2%	76,5%	76,2%	75,9%	75,0%	74,1%	74,4%	74,3%	74,1%
[20-54]	87,7%	87,8%	87,4%	86,8%	86,4%	86,3%	86,5%	86,6%	86,5%	86,4%
[55-64]	48,3%	54,2%	58,1%	62,4%	64,7%	62,0%	57,6%	56,7%	56,1%	56,2%
[20-64]	80,0%	80,9%	81,1%	80,9%	80,5%	79,3%	78,5%	79,0%	79,1%	79,0%
Female										
[15-19]	15,2%	15,3%	15,2%	15,2%	15,3%	15,3%	15,3%	15,2%	15,2%	15,2%
[65+]	1,2%	1,2%	1,5%	1,5%	1,6%	1,9%	2,2%	2,3%	2,1%	2,0%
[15-64]	50,9%	52,1%	52,6%	53,3%	54,6%	56,5%	59,0%	61,9%	63,5%	64,3%
[20-54]	61,5%	62,2%	62,5%	64,0%	66,1%	68,4%	70,7%	72,8%	74,2%	75,2%
[55-64]	23,8%	29,4%	31,8%	34,2%	36,9%	39,1%	41,8%	46,2%	47,9%	49,1%
[20-64]	53,7%	55,0%	55,6%	56,4%	57,7%	59,7%	62,4%	65,8%	67,7%	68,7%
Male and Female										
[15-19]	17,2%	17,4%	17,3%	17,3%	17,5%	17,4%	17,4%	17,3%	17,3%	17,3%
[65+]	2,6%	2,6%	2,9%	3,0%	3,2%	3,4%	3,4%	3,2%	2,9%	2,7%
[15-64]	63,2%	64,2%	64,7%	64,9%	65,4%	65,9%	66,7%	68,3%	69,0%	69,4%
[20-54]	74,7%	75,2%	75,2%	75,6%	76,5%	77,6%	78,8%	79,9%	80,5%	80,9%
[55-64]	35,7%	41,5%	44,7%	48,1%	50,6%	50,5%	49,7%	51,5%	52,0%	52,7%
[20-64]	66,9%	68,0%	68,5%	68,8%	69,3%	69,7%	70,6%	72,6%	73,5%	74,0%

C2.3 - Employment rates by age bracket

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[15-64]	57,2%	58,5%	59,1%	59,4%	60,0%	60,6%	61,6%	63,2%	64,0%	64,4%
[20-54]	67,7%	68,4%	68,6%	69,1%	69,9%	71,0%	72,5%	73,7%	74,6%	75,1%
[55-64]	34,0%	39,5%	42,6%	45,9%	48,4%	48,3%	47,7%	49,5%	50,0%	50,7%
[20-64]	61,0%	62,3%	62,9%	63,3%	63,9%	64,4%	65,5%	67,5%	68,5%	69,1%

C3 - EPC-WGA baseline scenario : pension expenditure

C3.1 - Total pension expenditure/GDP and its decomposition

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Total pension expenditure/GDP	13,9%	13,8%	14,3%	14,5%	15,0%	15,7%	16,1%	15,6%	14,9%	14,1%
Average pension/(GDP per worker)	16,3%	16,0%	15,9%	15,6%	15,1%	14,5%	13,7%	12,9%	12,2%	11,5%
Number of pensions/workers	85,1%	86,4%	89,7%	93,3%	99,1%	108,5%	117,0%	120,8%	123,0%	122,6%

C3.2 - Pension expenditure (2000 prices)

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Total pension expenditure (mln €)	**178.014**	**196.812**	**218.208**	**238.041**	**261.185**	**286.669**	**303.856**	**308.585**	**310.703**	**310.316**
Public pensions	174.350	192.788	213.487	232.792	255.286	279.969	296.506	300.783	302.892	302.731
Direct pensions	144.033	160.236	178.673	195.848	216.372	239.371	254.635	257.998	259.468	258.857
for private sector employees	88.230	96.437	106.805	117.609	132.514	150.762	165.102	169.270	171.950	172.209
for public sector employees	34.683	39.865	45.446	50.349	54.904	59.076	60.413	60.611	59.884	59.308
for self-employed	21.119	23.933	26.422	27.891	28.953	29.533	29.120	28.117	27.634	27.341
Survivors and child pensions	30.317	32.552	34.814	36.943	38.914	40.597	41.870	42.785	43.424	43.874
for private sector employees	19.123	20.413	21.751	23.036	24.308	25.540	26.645	27.583	28.398	29.139
for public sector employees	6.931	7.241	7.473	7.648	7.831	8.062	8.326	8.534	8.566	8.434
for self-employed	4.263	4.898	5.589	6.259	6.775	6.996	6.900	6.668	6.461	6.300
Old age means-tested transfers (a) (b)	3.664	4.025	4.721	5.249	5.900	6.700	7.351	7.802	7.811	7.585

(a) Social pensions and old age allowances starting from 1996. *(b) Net of reimbursements of pensions (or part of their amount) unduly paid.*

C3.3 - Number of pensions (thousands)

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Number of pensions (thousands)	**18.831**	**19.301**	**19.747**	**20.181**	**20.947**	**21.944**	**22.492**	**22.308**	**21.880**	**21.205**
Public pensions	18.033	18.455	18.807	19.188	19.885	20.782	21.255	21.041	20.664	20.076
Direct pensions	13.221	13.524	13.838	14.252	15.022	16.011	16.587	16.468	16.163	15.627
for private sector employees	7.700	7.731	7.851	8.134	8.763	9.633	10.325	10.431	10.346	10.041
for public sector employees	1.921	2.134	2.350	2.539	2.724	2.900	2.927	2.895	2.822	2.738
for self-employed	3.600	3.659	3.638	3.579	3.534	3.478	3.335	3.142	2.995	2.847
Survivors and child pensions	4.812	4.931	4.969	4.936	4.863	4.771	4.668	4.573	4.501	4.450
for private sector employees	3.080	3.114	3.089	3.019	2.941	2.883	2.849	2.830	2.822	2.819
for public sector employees	617	646	664	674	682	688	692	688	675	658
for self-employed	1.115	1.171	1.216	1.243	1.240	1.200	1.127	1.055	1.004	972
Old age means-tested transfers (a)	798	846	940	993	1.062	1.162	1.237	1.267	1.216	1.129

(a) Social pensions and old age allowances starting from 1996.

C3.4 - Average pension (2000 prices)

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Average pension (euro)	**9.453**	**10.197**	**11.050**	**11.795**	**12.469**	**13.064**	**13.510**	**13.833**	**14.201**	**14.634**
Public pensions	9.669	10.446	11.351	12.132	12.838	13.472	13.950	14.295	14.658	15.079
Direct pensions	10.895	11.848	12.911	13.742	14.404	14.950	15.351	15.667	16.053	16.565
for private sector employees	11.459	12.474	13.604	14.459	15.121	15.650	15.990	16.228	16.620	17.151
for public sector employees	18.054	18.679	19.340	19.831	20.155	20.369	20.639	20.938	21.221	21.657
for self-employed	5.867	6.541	7.264	7.793	8.192	8.492	8.732	8.948	9.227	9.603
Survivors and child pensions	6.300	6.601	7.006	7.484	8.001	8.510	8.970	9.357	9.648	9.860
for private sector employees	6.208	6.555	7.041	7.630	8.264	8.860	9.353	9.747	10.065	10.336
for public sector employees	11.240	11.205	11.258	11.342	11.483	11.711	12.036	12.400	12.685	12.810
for self-employed	3.823	4.183	4.597	5.036	5.463	5.832	6.121	6.323	6.434	6.482
Old age means-tested transfers (a)	4.590	4.758	5.023	5.287	5.554	5.765	5.943	6.157	6.423	6.717

(a) Social pensions and old age allowances starting from 1996.

C4 - EPC-WGA baseline scenario: health care expenditure as a share of GDP - CPS linked to GDP per capita

C4.1 - Acute e long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,4%	3,4%	3,4%	3,4%	3,4%	3,3%	3,2%	3,0%	2,9%	2,9%
[65-79]	1,9%	1,9%	2,0%	2,1%	2,3%	2,5%	2,8%	3,0%	3,0%	2,8%
[80+]	0,8%	1,0%	1,1%	1,2%	1,3%	1,4%	1,5%	1,7%	1,9%	2,2%
Total	**6,1%**	**6,3%**	**6,5%**	**6,7%**	**7,0%**	**7,2%**	**7,5%**	**7,7%**	**7,8%**	**7,9%**

C4.2 - Acute care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,2%	3,2%	3,1%	3,1%	3,1%	3,1%	2,9%	2,8%	2,7%	2,7%
[65-79]	1,7%	1,7%	1,8%	1,9%	2,0%	2,2%	2,4%	2,6%	2,6%	2,4%
[80+]	0,6%	0,7%	0,8%	0,9%	1,0%	1,1%	1,2%	1,3%	1,5%	1,7%
Total	**5,4%**	**5,6%**	**5,7%**	**5,9%**	**6,1%**	**6,3%**	**6,5%**	**6,7%**	**6,8%**	**6,8%**

C4.3 - Long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,2%	0,2%	0,2%	0,2%
[65-79]	0,2%	0,2%	0,2%	0,3%	0,3%	0,3%	0,3%	0,4%	0,4%	0,3%
[80+]	0,2%	0,2%	0,3%	0,3%	0,3%	0,3%	0,4%	0,4%	0,5%	0,5%
Total	**0,7%**	**0,7%**	**0,8%**	**0,8%**	**0,9%**	**0,9%**	**0,9%**	**1,0%**	**1,1%**	**1,1%**

C5 - EPC-WGA baseline scenario: health care expenditure as a share of GDP - CPS linked to GDP per worker

C5.1 - Acute e long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,4%	3,3%	3,3%	3,3%	3,4%	3,4%	3,3%	3,2%	3,1%	3,1%
[65-79]	1,9%	1,9%	2,0%	2,1%	2,3%	2,5%	2,9%	3,1%	3,1%	2,9%
[80+]	0,8%	0,9%	1,1%	1,2%	1,3%	1,4%	1,6%	1,8%	2,1%	2,3%
Total	**6,0%**	**6,1%**	**6,4%**	**6,6%**	**6,9%**	**7,3%**	**7,8%**	**8,1%**	**8,3%**	**8,3%**

C5.2 - Acute care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,1%	3,1%	3,0%	3,1%	3,1%	3,1%	3,0%	2,9%	2,9%	2,8%
[65-79]	1,6%	1,7%	1,8%	1,8%	2,0%	2,2%	2,5%	2,8%	2,8%	2,5%
[80+]	0,6%	0,7%	0,8%	0,9%	1,0%	1,1%	1,2%	1,3%	1,6%	1,8%
Total	**5,3%**	**5,4%**	**5,6%**	**5,8%**	**6,0%**	**6,4%**	**6,8%**	**7,0%**	**7,2%**	**7,1%**

C5.3 - Long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,2%	0,2%	0,2%
[65-79]	0,2%	0,2%	0,2%	0,2%	0,3%	0,3%	0,3%	0,4%	0,4%	0,4%
[80+]	0,2%	0,2%	0,3%	0,3%	0,3%	0,4%	0,4%	0,4%	0,5%	0,6%
Total	**0,7%**	**0,7%**	**0,8%**	**0,8%**	**0,8%**	**0,9%**	**1,0%**	**1,1%**	**1,1%**	**1,2%**

D1 - EPC-WGA Lisbon scenario: demographic assumption (Eurostat high variant)

D1.1 - Demographic parameters

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Migration flows (thousands)	103.674	105.892	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
Fertilitity rate (children per women)	1,5	1,6	1,7	1,7	1,7	1,8	1,8	1,8	1,8	1,8
Life expectancy (male)	77,4	78,6	79,8	80,8	81,7	82,4	83,0	83,5	83,8	84,0
Life expectancy (female)	83,3	84,2	85,0	85,8	86,4	86,9	87,3	87,6	87,9	88,0

D1.2 - Population

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Male										
[0-14]	4.337.798	4.427.562	4.464.772	4.301.755	4.124.665	4.077.752	4.147.916	4.243.794	4.270.649	4.206.749
[15-19]	1.481.800	1.481.712	1.432.633	1.563.998	1.567.614	1.469.236	1.402.064	1.391.380	1.422.805	1.472.437
[20-54]	14.349.922	14.087.322	13.698.751	12.994.732	12.318.847	11.761.230	11.397.334	11.231.791	11.148.139	11.097.027
[55-64]	3.417.367	3.557.962	3.644.698	4.053.336	4.444.941	4.467.710	4.099.570	3.575.856	3.240.457	3.156.953
[65-79]	3.744.413	3.884.290	4.160.109	4.329.768	4.645.960	5.057.873	5.585.321	5.879.014	5.673.070	5.138.787
[65+]	4.690.401	5.078.580	5.586.304	5.982.105	6.452.345	7.126.064	7.839.104	8.362.315	8.518.043	8.318.741
[80+]	945.988	1.194.290	1.426.195	1.652.337	1.806.385	2.068.191	2.253.783	2.483.301	2.844.973	3.179.954
total	28.277.288	28.633.138	28.827.158	28.895.926	28.908.412	28.901.992	28.885.988	28.805.136	28.600.093	28.251.907
Female										
[0-14]	4.116.356	4.212.830	4.259.108	4.102.668	3.932.989	3.887.637	3.954.164	4.045.330	4.070.696	4.009.508
[15-19]	1.405.148	1.402.339	1.355.169	1.491.899	1.494.807	1.400.462	1.335.957	1.325.484	1.355.299	1.402.554
[20-54]	14.070.763	13.713.131	13.236.929	12.462.206	11.732.707	11.133.227	10.759.407	10.594.775	10.514.872	10.469.694
[55-64]	3.627.896	3.745.259	3.799.497	4.169.350	4.521.373	4.501.938	4.072.589	3.494.219	3.135.094	3.039.164
[65-79]	4.723.848	4.756.937	4.947.650	5.037.092	5.296.761	5.635.400	6.107.697	6.340.690	6.032.323	5.381.133
[65+]	6.607.929	6.982.717	7.448.069	7.775.064	8.169.778	8.769.475	9.415.098	9.870.004	9.935.510	9.642.309
[80+]	1.884.081	2.225.780	2.500.419	2.737.972	2.873.017	3.134.075	3.307.401	3.529.314	3.903.187	4.261.176
total	29.828.092	30.056.276	30.098.772	30.001.187	29.851.654	29.692.739	29.537.215	29.329.812	29.011.471	28.563.229
Male and Female										
[0-14]	8.454.154	8.640.392	8.723.880	8.404.423	8.057.654	7.965.389	8.102.080	8.289.124	8.341.345	8.216.257
[15-19]	2.886.948	2.884.051	2.787.802	3.055.897	3.062.421	2.869.698	2.738.021	2.716.864	2.778.104	2.874.991
[20-54]	28.420.685	27.800.453	26.935.680	25.456.938	24.051.554	22.894.457	22.156.741	21.826.566	21.663.011	21.566.721
[55-64]	7.045.263	7.303.221	7.444.195	8.222.686	8.966.314	8.969.648	8.172.159	7.070.075	6.375.551	6.196.117
[65-79]	8.468.261	8.641.227	9.107.759	9.366.860	9.942.721	10.693.273	11.693.018	12.219.704	11.705.393	10.519.920
[65+]	11.298.330	12.061.297	13.034.373	13.757.169	14.622.123	15.895.539	17.254.202	18.232.319	18.453.553	17.961.050
[80+]	2.830.069	3.420.070	3.926.614	4.390.309	4.679.402	5.202.266	5.561.184	6.012.615	6.748.160	7.441.130
total	58.105.380	58.689.414	58.925.930	58.897.113	58.760.066	58.594.731	58.423.203	58.134.948	57.611.564	56.815.136

D1.3 - Demographic indicators

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Elderly dependency ratio (a)	31,9%	34,4%	37,9%	40,8%	44,3%	49,9%	56,9%	63,1%	65,8%	64,7%
Youth dependency ratio (b)	32,0%	32,8%	33,5%	34,0%	33,7%	34,0%	35,7%	38,1%	39,7%	39,9%
Total dependency ratio (c)	63,8%	67,2%	71,4%	74,9%	78,0%	83,9%	92,6%	101,2%	105,5%	104,6%
Ageing index (d)	99,6%	104,7%	113,2%	120,0%	131,5%	146,7%	159,2%	165,7%	166,0%	161,9%

(a) pop.[65+]/pop.[20-64] (b) pop.[0-19]/pop.[20-64] (c) (pop.[0-19]+pop.[65+])/pop.[20-64] (d) pop.[65+]/pop.[0-19]

D2 - EPC-WGA Lisbon scenario: macroeconomic assumption

D2.1 - Employment, labour productivity and GDP

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Participation rate (a)	43,2%	45,0%	45,4%	45,8%	46,2%	45,9%	45,6%	45,3%	44,8%	44,9%
Unemployment rate	8,8%	8,4%	7,8%	7,3%	6,9%	6,4%	5,8%	5,2%	4,6%	4,0%
Labour force (thousands)	25.128	26.394	26.725	26.954	27.163	26.923	26.617	26.353	25.786	25.513
Employment (thousands)	22.913	24.181	24.633	24.983	25.291	25.195	25.065	24.984	24.599	24.496
Employment rate (b)	59,8%	63,7%	66,4%	68,1%	70,3%	72,9%	76,1%	79,3%	79,9%	80,0%
GDP in real terms (mln € 2000)	1.311.054	1.479.837	1.605.623	1.727.898	1.849.916	1.943.200	2.032.934	2.125.842	2.191.003	2.279.408
GDP in nominal terms (mln €)	1.461.759	1.821.670	2.182.229	2.592.839	3.064.857	3.554.486	4.105.663	4.740.149	5.393.923	6.195.618
real GDP per capita (€ 2000) (c)	22.563	25.215	27.248	29.338	31.483	33.163	34.797	36.567	38.031	40.120
real GDP per worker (€ 2000)	57.218	61.199	65.181	69.162	73.144	77.125	81.107	85.088	89.070	93.051
nominal GDP per capita (€) (c)	25.157	31.039	37.033	44.023	52.159	60.662	70.275	81.537	93.626	109.049
nominal GDP per worker (€)	63.795	75.336	88.588	103.783	121.181	141.077	163.801	189.728	219.277	252.921
GDP deflator	111,5	123,1	135,9	150,1	165,7	182,9	202,0	223,0	246,2	271,8
CPI deflator (d)	111,6	123,2	136,0	150,2	165,8	183,1	202,2	223,2	246,4	272,1

(a) Labour force/total population (b) Employment levels/pop15-64 (c) Population registered at the 1st of January (d) Consumer Price Index for the family of employed (white and blue collar) without tobacco.

D2.2 - Participation rates by sex and age bracket

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Male										
[15-19]	22,0%	22,9%	22,4%	22,3%	22,6%	22,7%	22,6%	22,5%	22,4%	22,4%
[65+]	4,6%	4,5%	4,9%	4,9%	5,6%	6,4%	6,1%	5,9%	5,4%	5,1%
[15-64]	76,4%	78,5%	79,1%	79,3%	79,9%	80,3%	81,4%	82,8%	82,7%	82,4%
[20-54]	88,7%	90,2%	90,7%	90,7%	90,5%	90,5%	90,9%	91,1%	91,2%	91,1%
[55-64]	48,8%	55,3%	58,5%	65,0%	70,9%	72,2%	75,0%	80,2%	80,3%	80,0%
[20-64]	81,0%	83,1%	83,9%	84,5%	85,2%	85,4%	86,7%	88,5%	88,7%	88,6%
Female										
[15-19]	17,5%	18,3%	17,7%	17,6%	18,0%	18,0%	17,9%	17,8%	17,7%	17,7%
[65+]	1,3%	1,4%	1,6%	1,6%	2,0%	2,5%	2,7%	3,1%	3,1%	3,1%
[15-64]	53,1%	58,7%	62,5%	65,1%	67,8%	71,3%	75,6%	79,2%	79,7%	79,4%
[20-54]	64,0%	70,2%	75,1%	79,1%	82,6%	85,6%	87,1%	87,6%	87,7%	87,6%
[55-64]	24,7%	31,9%	35,3%	41,0%	46,1%	52,6%	64,3%	77,1%	79,6%	79,6%
[20-64]	55,9%	61,9%	66,1%	69,4%	72,4%	76,1%	80,8%	85,0%	85,8%	85,8%
Male and Female										
[15-19]	19,8%	20,7%	20,1%	20,0%	20,4%	20,4%	20,3%	20,2%	20,1%	20,1%
[65+]	2,7%	2,7%	3,0%	3,1%	3,6%	4,2%	4,2%	4,4%	4,2%	4,0%
[15-64]	64,8%	68,6%	70,9%	72,3%	74,0%	75,9%	78,6%	81,1%	81,2%	80,9%
[20-54]	76,4%	80,3%	83,0%	85,0%	86,6%	88,1%	89,0%	89,4%	89,5%	89,4%
[55-64]	36,4%	43,3%	46,7%	52,8%	58,4%	62,4%	69,6%	78,7%	79,9%	79,8%
[20-64]	68,5%	72,6%	75,1%	77,1%	78,9%	80,9%	83,8%	86,8%	87,3%	87,2%

D2.3 - Employment rates by age bracket

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[15-64]	59,0%	62,8%	65,3%	66,9%	68,8%	70,9%	73,9%	76,8%	77,4%	77,6%
[20-54]	69,7%	73,6%	76,4%	78,6%	80,4%	82,0%	83,4%	84,4%	85,1%	85,6%
[55-64]	34,9%	41,5%	44,8%	50,9%	56,3%	60,3%	67,5%	76,5%	77,9%	78,0%
[20-64]	62,8%	66,8%	69,5%	71,8%	73,8%	75,9%	79,2%	82,5%	83,5%	83,9%

D3 - EPC-WGA Lisbon scenario: pension expenditure

D3.1 - Total pension expenditure/GDP and its decomposition

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Total pension expenditure/GDP	13,6%	13,4%	13,8%	13,9%	14,2%	14,6%	14,6%	14,3%	14,5%	14,3%
Average pension/(GDP per worker)	16,5%	16,7%	16,9%	16,9%	16,8%	16,6%	16,2%	15,8%	15,6%	15,4%
Number of pensions/workers	82,4%	80,6%	81,4%	82,4%	84,5%	88,4%	90,1%	90,4%	93,0%	93,3%

C3.2 - Pension expenditure (2000 prices)

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Total pension expenditure (mln €)	**178.681**	**198.424**	**220.621**	**240.353**	**262.122**	**284.246**	**296.457**	**303.637**	**318.097**	**326.727**
Public pensions	174.990	194.277	215.639	234.771	255.795	276.989	288.397	294.986	309.446	318.367
Direct pensions	144.923	162.373	181.848	199.396	219.097	239.314	250.145	256.421	270.724	279.375
for private sector employees	88.792	97.810	108.812	119.847	134.298	150.461	160.722	165.163	176.443	183.316
for public sector employees	34.887	40.316	46.026	50.901	55.028	58.702	60.137	63.067	66.099	67.920
for self-employed	21.244	24.247	27.010	28.649	29.771	30.151	29.286	28.192	28.183	28.140
Survivors and child pensions	30.067	31.904	33.791	35.375	36.698	37.675	38.252	38.565	38.721	38.991
for private sector employees	18.974	20.023	21.151	22.093	22.931	23.664	24.265	24.741	25.139	25.664
for public sector employees	6.879	7.114	7.257	7.320	7.362	7.431	7.549	7.682	7.729	7.687
for self-employed	4.214	4.767	5.383	5.962	6.405	6.580	6.438	6.141	5.853	5.640
Old age means-tested transfers (a) (b)	3.690	4.148	4.982	5.582	6.327	7.257	8.059	8.651	8.651	8.361

(a) Social pensions and old age allowances starting from 1996. *(b) Net of reimbursements of pensions (or part of their amount) unduly paid.*

C3.3 - Number of pensions (thousands)

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Number of pensions (thousands)	**18.890**	**19.481**	**20.050**	**20.576**	**21.360**	**22.276**	**22.594**	**22.591**	**22.888**	**22.848**
Public pensions	18.090	18.631	19.100	19.568	20.275	21.081	21.314	21.269	21.606	21.644
Direct pensions	13.300	13.764	14.243	14.792	15.621	16.568	16.948	17.036	17.469	17.549
for private sector employees	7.747	7.866	8.077	8.436	9.105	9.933	10.443	10.604	11.022	11.149
for public sector employees	1.931	2.164	2.402	2.605	2.771	2.929	2.956	3.046	3.121	3.147
for self-employed	3.621	3.734	3.765	3.751	3.745	3.706	3.548	3.386	3.326	3.253
Survivors and child pensions	4.791	4.866	4.857	4.776	4.654	4.513	4.366	4.234	4.138	4.094
for private sector employees	3.069	3.079	3.028	2.930	2.818	2.722	2.653	2.604	2.576	2.576
for public sector employees	613	636	647	650	650	648	646	641	630	618
for self-employed	1.109	1.151	1.181	1.196	1.186	1.143	1.068	988	931	900
Old age means-tested transfers (a)	800	851	950	1.008	1.085	1.195	1.280	1.321	1.281	1.204

(a) Social pensions and old age allowances starting from 1996.

C3.4 - Average pension (2000 prices)

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Average pension (euro)	**9.459**	**10.185**	**11.004**	**11.681**	**12.271**	**12.760**	**13.121**	**13.441**	**13.898**	**14.300**
Public pensions	9.673	10.428	11.290	11.998	12.616	13.139	13.531	13.869	14.322	14.709
Direct pensions	10.897	11.797	12.767	13.480	14.026	14.445	14.760	15.052	15.498	15.919
for private sector employees	11.461	12.434	13.472	14.207	14.750	15.147	15.391	15.576	16.008	16.442
for public sector employees	18.065	18.630	19.160	19.541	19.856	20.044	20.341	20.705	21.179	21.584
for self-employed	5.866	6.493	7.175	7.638	7.949	8.136	8.253	8.326	8.474	8.650
Survivors and child pensions	6.276	6.556	6.958	7.407	7.886	8.348	8.760	9.109	9.358	9.523
for private sector employees	6.183	6.503	6.984	7.540	8.136	8.694	9.148	9.501	9.759	9.963
for public sector employees	11.221	11.178	11.213	11.260	11.333	11.462	11.682	11.979	12.264	12.433
for self-employed	3.801	4.142	4.558	4.985	5.401	5.758	6.030	6.213	6.284	6.266
Old age means-tested transfers (a)	4.615	4.876	5.247	5.536	5.829	6.073	6.296	6.547	6.752	6.943

(a) Social pensions and old age allowances starting from 1996.

D4 - EPC-WGA Lisbon scenario : health care expenditure as a share of GDP - CPS linked to GDP per capita

D4.1 - Acute e long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,4%	3,4%	3,4%	3,4%	3,4%	3,3%	3,1%	3,0%	2,9%	2,9%
[65-79]	1,9%	1,9%	2,0%	2,1%	2,2%	2,4%	2,6%	2,8%	2,7%	2,5%
[80+]	0,8%	1,0%	1,1%	1,3%	1,3%	1,5%	1,6%	1,7%	2,0%	2,2%
Total	**6,1%**	**6,3%**	**6,5%**	**6,7%**	**6,9%**	**7,1%**	**7,3%**	**7,5%**	**7,6%**	**7,6%**

D4.2 - Acute care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,2%	3,1%	3,1%	3,1%	3,1%	3,0%	2,9%	2,8%	2,7%	2,7%
[65-79]	1,7%	1,7%	1,8%	1,8%	1,9%	2,1%	2,3%	2,4%	2,4%	2,2%
[80+]	0,6%	0,7%	0,8%	0,9%	1,0%	1,1%	1,2%	1,3%	1,5%	1,7%
Total	**5,4%**	**5,6%**	**5,7%**	**5,9%**	**6,1%**	**6,2%**	**6,4%**	**6,5%**	**6,6%**	**6,5%**

D4.3 - Long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,2%	0,2%	0,2%	0,2%
[65-79]	0,2%	0,2%	0,2%	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
[80+]	0,2%	0,2%	0,3%	0,3%	0,3%	0,4%	0,4%	0,4%	0,5%	0,5%
Total	**0,7%**	**0,7%**	**0,8%**	**0,8%**	**0,9%**	**0,9%**	**0,9%**	**1,0%**	**1,0%**	**1,1%**

D5 - EPC-WGA Lisbon scenario : health care expenditure as a share of GDP- CPS linked to GDP per worker

D5.1 - Acute e long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,3%	3,1%	3,0%	3,0%	2,9%	2,9%	2,7%	2,6%	2,6%	2,5%
[65-79]	1,8%	1,8%	1,8%	1,8%	1,9%	2,1%	2,3%	2,4%	2,4%	2,2%
[80+]	0,8%	0,9%	1,0%	1,1%	1,2%	1,3%	1,4%	1,5%	1,7%	1,9%
Total	**5,8%**	**5,8%**	**5,9%**	**5,9%**	**6,0%**	**6,2%**	**6,4%**	**6,6%**	**6,7%**	**6,7%**

D5.2 - Acute care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	3,0%	2,9%	2,8%	2,8%	2,7%	2,6%	2,5%	2,4%	2,4%	2,3%
[65-79]	1,6%	1,5%	1,6%	1,6%	1,7%	1,8%	2,0%	2,1%	2,1%	1,9%
[80+]	0,6%	0,7%	0,8%	0,8%	0,9%	1,0%	1,1%	1,2%	1,3%	1,5%
Total	**5,2%**	**5,1%**	**5,1%**	**5,2%**	**5,3%**	**5,5%**	**5,6%**	**5,7%**	**5,8%**	**5,7%**

D5.3 - Long term care

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
[0-64]	0,3%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
[65-79]	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,3%	0,3%	0,3%	0,3%
[80+]	0,2%	0,2%	0,2%	0,3%	0,3%	0,3%	0,3%	0,4%	0,4%	0,5%
Total	**0,7%**	**0,7%**	**0,7%**	**0,7%**	**0,7%**	**0,8%**	**0,8%**	**0,9%**	**0,9%**	**0,9%**

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