

Population ageing in Belgium: Outline and a Balanced solution

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A. Outline of the problem

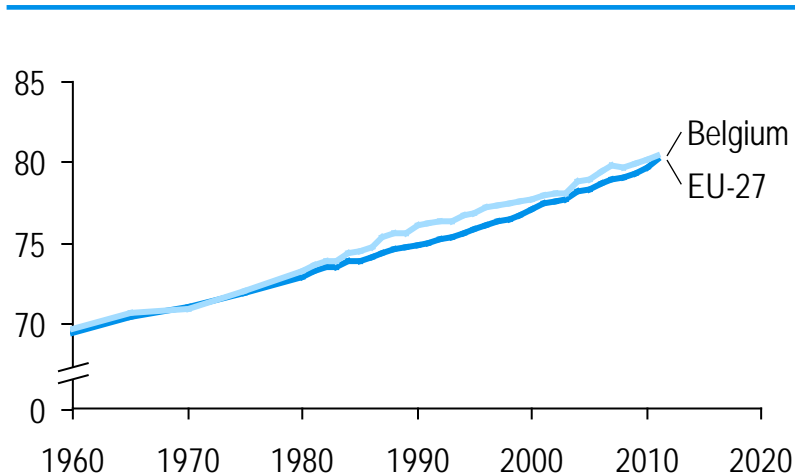
Roland Berger
Strategy Consultants



Two trends have impacted EU demography over the last 50 years: increasing life expectancy (+16%) and decreasing birth rate (-38%)

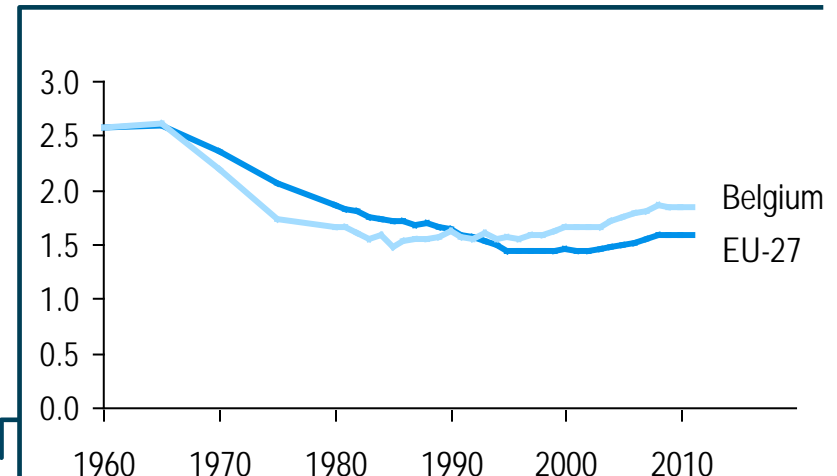
Key demographic trends in the EU

LIFE EXPECTANCY AT BIRTH [YEARS]



- > Life expectancy has risen with **10 years** since **1960**
- > An increase with **another 5 years** by **2050** is expected

BIRTH RATE [CHILDREN PER WOMAN]

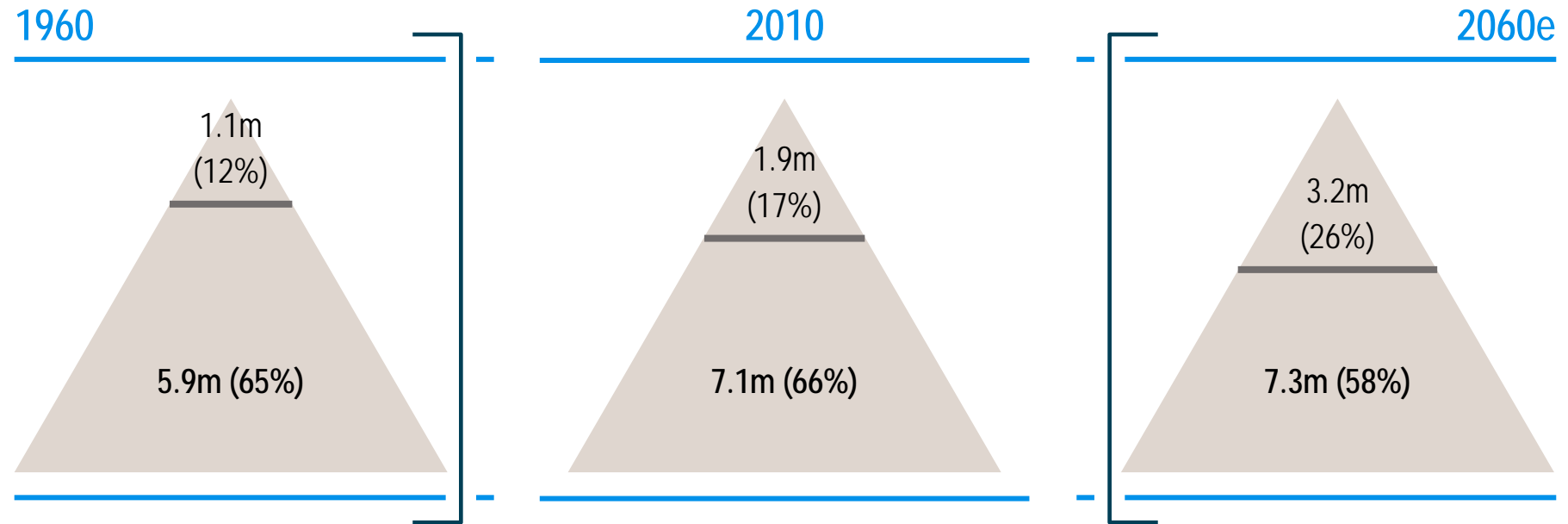


- > The number of **births** in the EU has fallen from **7.5m** in **1960** to **5.4m** in **2010**
- > The current birth rate is too low to fully replace each generation (this would require a birth rate of **2.1** for the EU)

PRELIMINARY – FOR DISCUSSION PURPOSES ONLY

Following these trends, the age pyramid has been reshaped over the last 50 yrs, and it will be further reshaped in the coming decades

The age pyramid in Belgium [1960¹⁾, 2010¹⁾ and 2060e²⁾; m of inhabitants; % of overall population]



While the age cohort of potentially working people was still 5.4 times larger than the group of 65+ in 1960, it was 3.8 times larger in 2010 and is expected to be only 2.3 times larger in 2060

1) Source: Eurostat

2) Source: Bureau du Plan

The demographic revolution threatens the supportability of both public and private pension systems

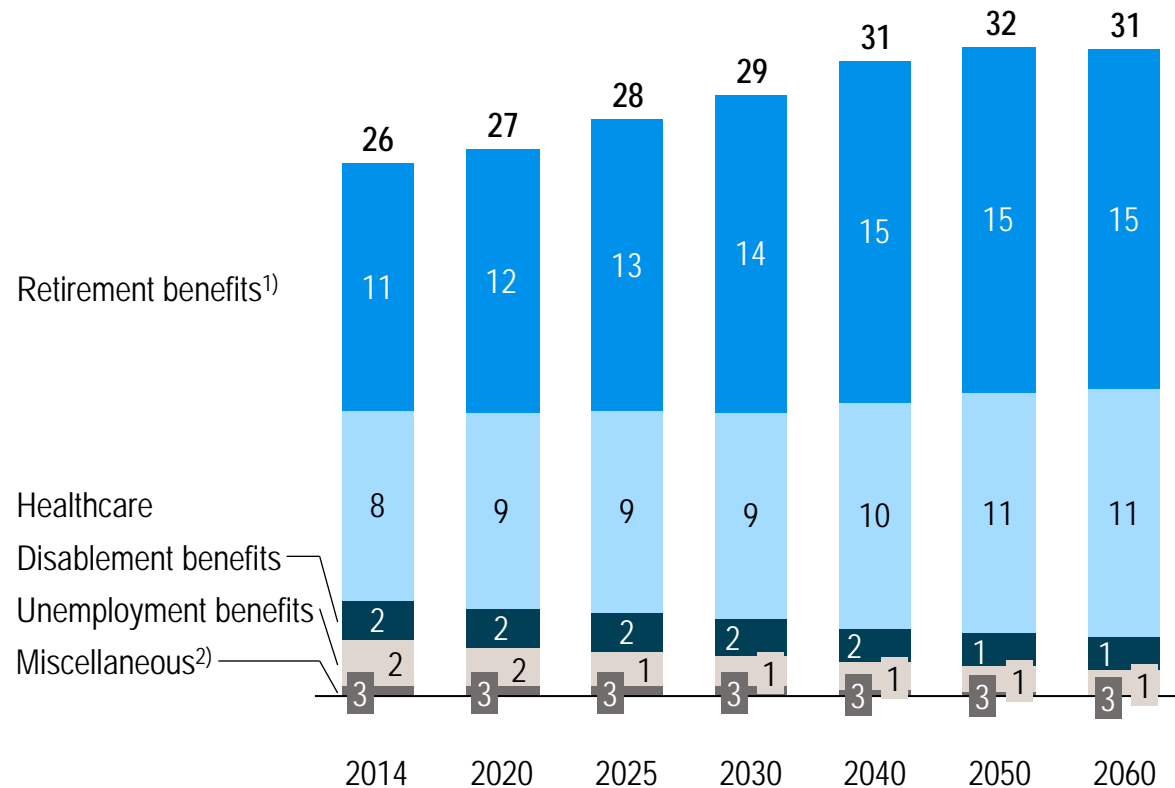
Threat of ageing population for pension systems

	<u>Type of scheme</u>	<u>Threat of ageing population</u>
<p>1. Public pensions</p>	<ul style="list-style-type: none"> > Predominantly Pay-As-You-Go funded schemes¹⁾ > Current contributions by the working population are used for the payment of current pensions 	<ul style="list-style-type: none"> > An increasing old-age-dependency ratio creates an imbalance between income and expenditure > At some point, contributions are no longer sufficient to cover pension expenditures
<p>2. Private pensions</p>	<ul style="list-style-type: none"> > Private pension funds are 'Fully Funded' > Current contributions by working population are invested towards meeting future benefits once people start their pension 	<ul style="list-style-type: none"> > The current and future value of assets held in portfolio by pension funds, depends on the economic situation > A decline in economic output caused by a shrinking workforce will hence negatively influence the value of pension portfolio

1) Some countries as Finland, Luxembourg and Cyprus have set up significant Public Pension funds

The cost of social security is expected to increase from 26% to 32% of GDP between 2014 and 2050

Projected cost for social security [% of GDP]



COMMENTS

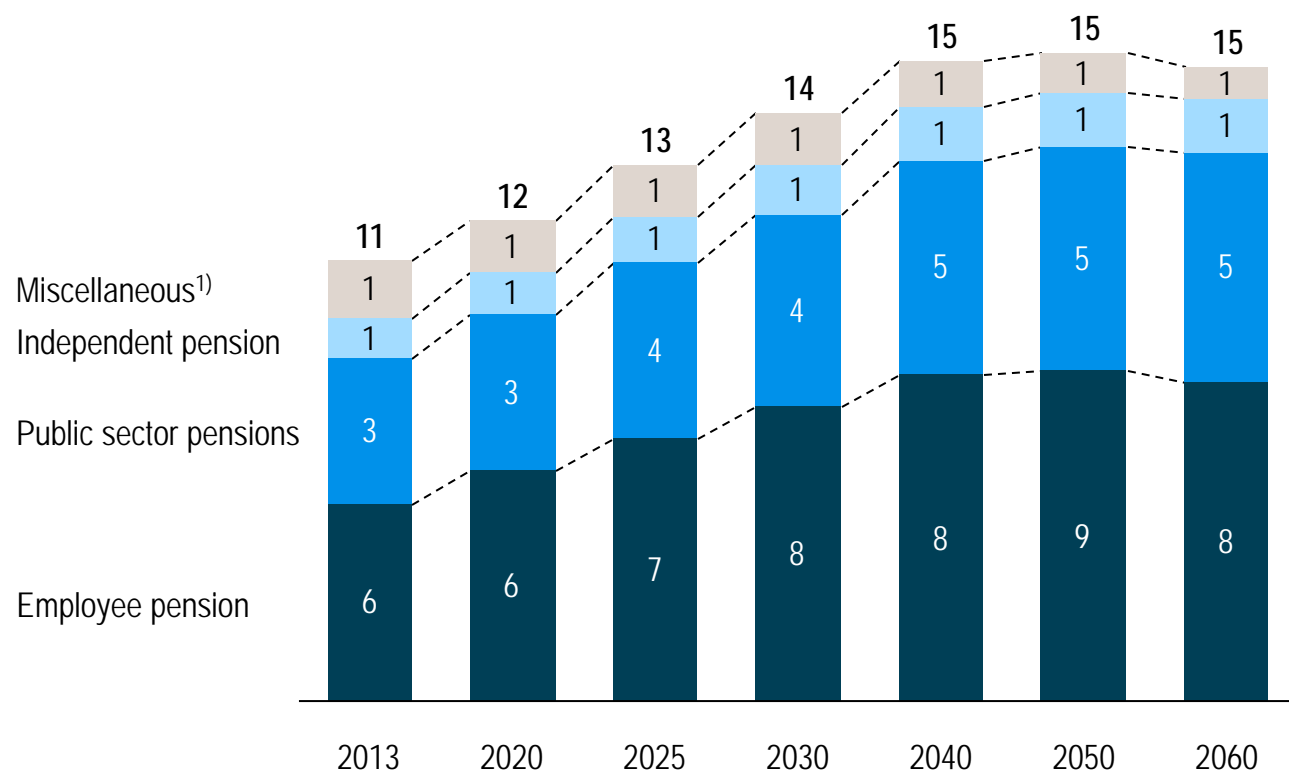
- > The annual total cost of social security will increase to 32% of GDP in 2050
- > Disablement and unemployment benefits are expected to decrease over time
- > The increase is mainly, but not solely caused by the higher expenses for retirement benefits: they are expected to increase with 4% pt. of GDP, but healthcare is also an important cause as it will increase over the same period with 2% pt



1) Retirement benefits including cost of early retirement
2) Miscellaneous: Childcare and diverse costs

Pure retirement benefits sum up to 11% of GDP in 2013, and an increase to 15% is expected by 2050

Projected cost of retirement benefits over different categories [% of GDP]



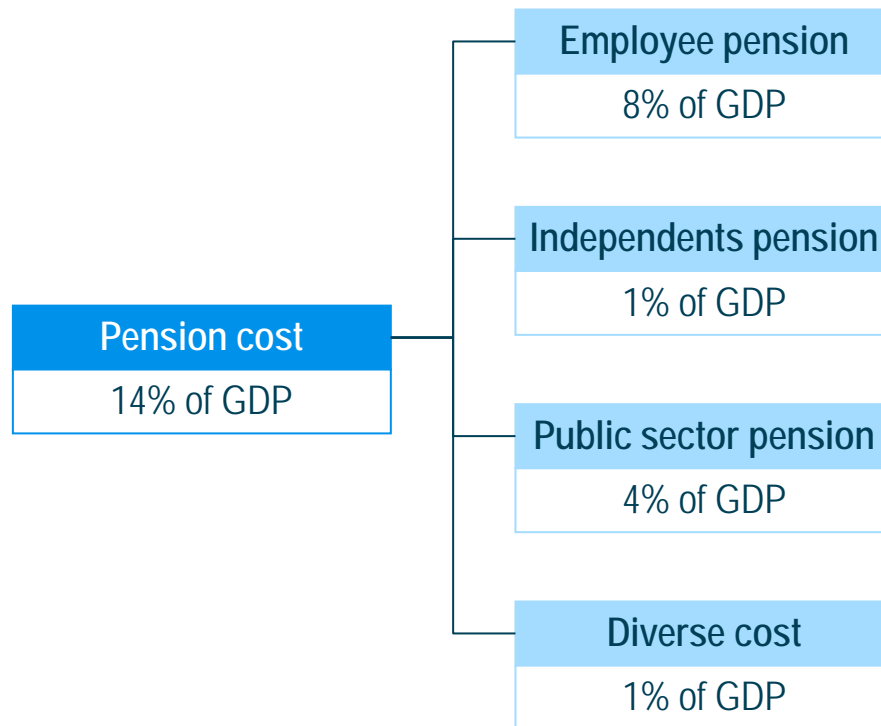
COMMENTS

- > The cost of all main cost categories (employee pension, public sector pension and independent pension) is increasing over time
- > By 2050, the **additional cost of retirement benefits is 4% pt. higher than in 2013.** This additional cost will have to be financed each year again

1) Miscellaneous includes the cost of early retirement, providing guaranteed retirement benefits, the retirement cost with public companies (NMBS, Belgacom and Belgian Post) and various small categories

PRELIMINARY – FOR DISCUSSION PURPOSES ONLY

Zoom on 2030: The pension cost will account for 14% of GDP



MAIN PARAMETERS

- > # employees retired
- > Pension cost per employee

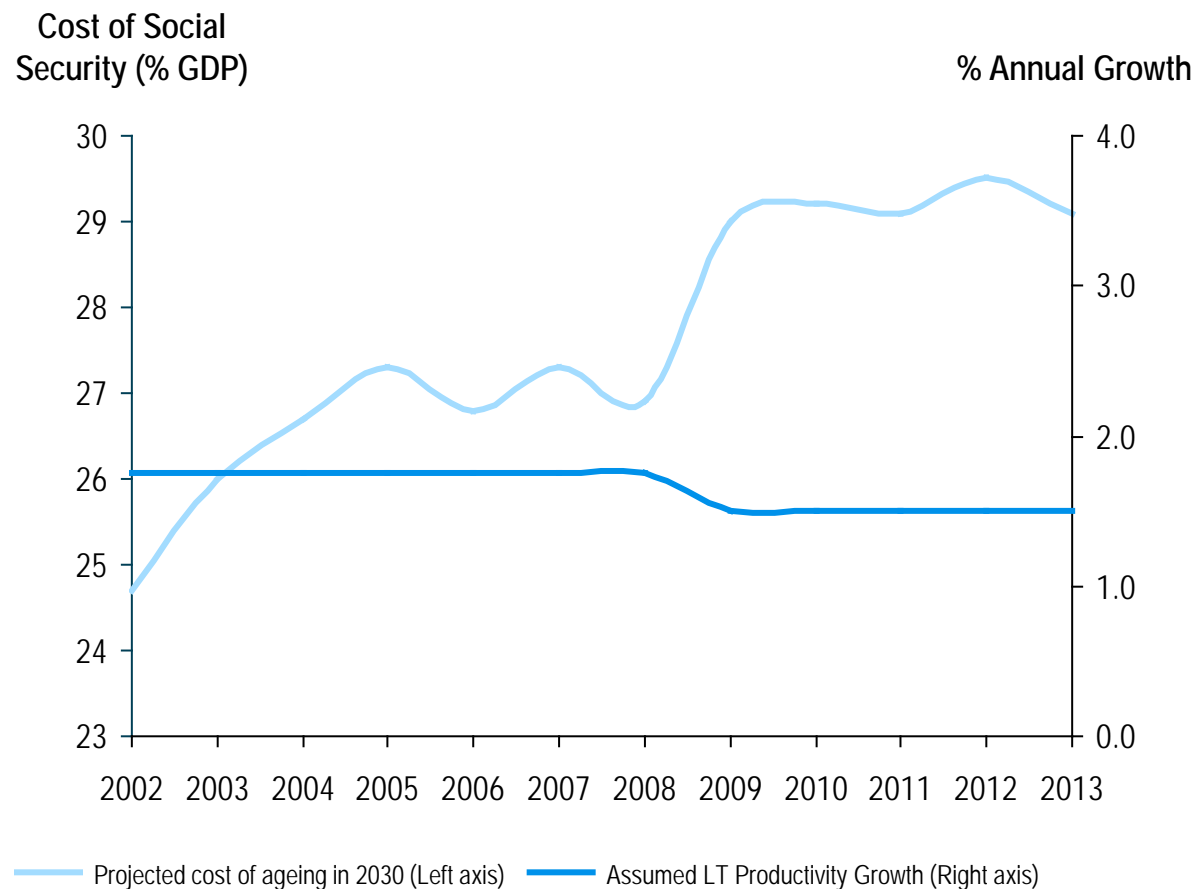
- > # independents retired
- > Pension cost per independent

- > # people from public sector retired
- > Pension cost per official

- > Pensions for employees of state companies
- > Cost for early retirement
- > Guaranteed minimum pensions
- > Payments for labor accidents, professional diseases, handicapped people, subsistence income

The cost of ageing has been revised over the last years, and is becoming higher and higher

Estimated Total Cost of Social Security in 2030 [% of GDP]

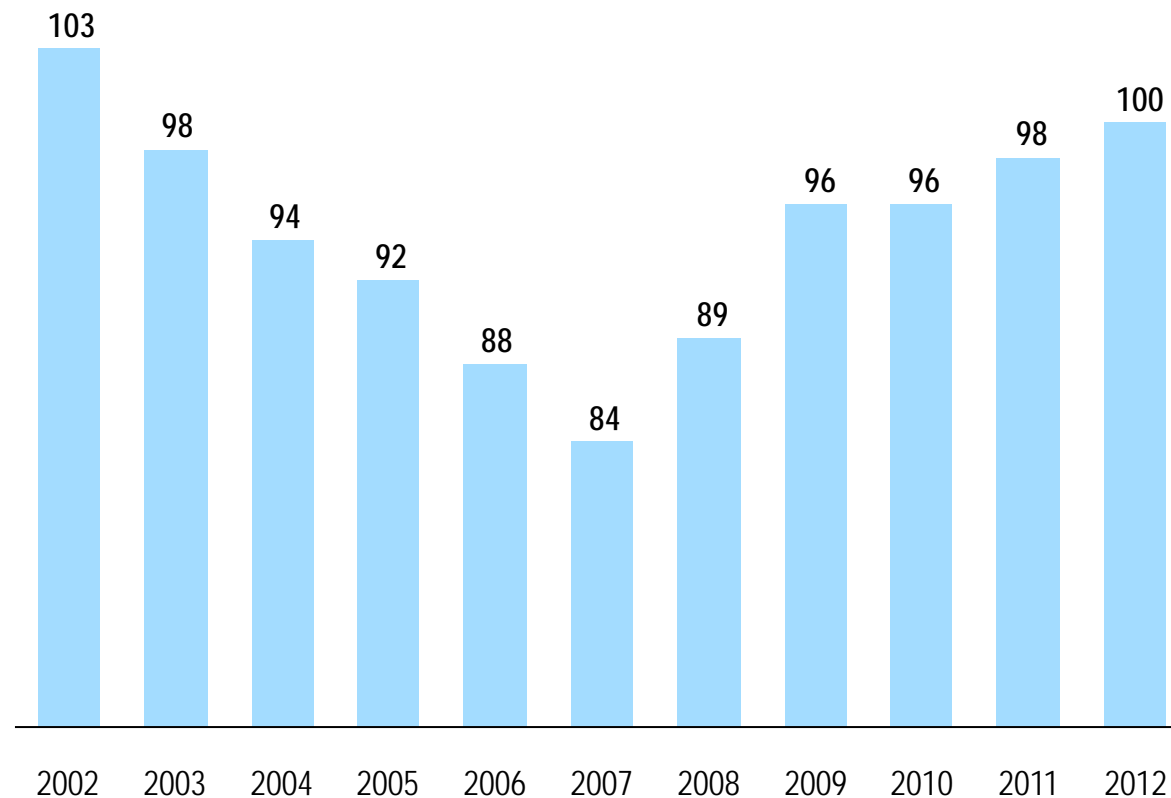


COMMENTS

- > Every year, the annual cost of social security in Belgium is estimated by the "Studiecommissie voor de Vergrijzing". This comprehensive estimation exercise covers the expenses for retirement benefits, healthcare, disablement, unemployment and childcare
- > The estimated cost is now **substantially higher than in the early reports**: while the estimated annual cost in 2002 was 25% for 2030, in the latest estimation the expenses will account for 29% of the GDP in 2030
- > **Since 2009, the estimated cost increased strongly** following a downward revision of the productivity growth assumption (from 1.75% to 1.50%)

There were, however, no surpluses built up by the government over the last ten years

Government debt [% of GDP]



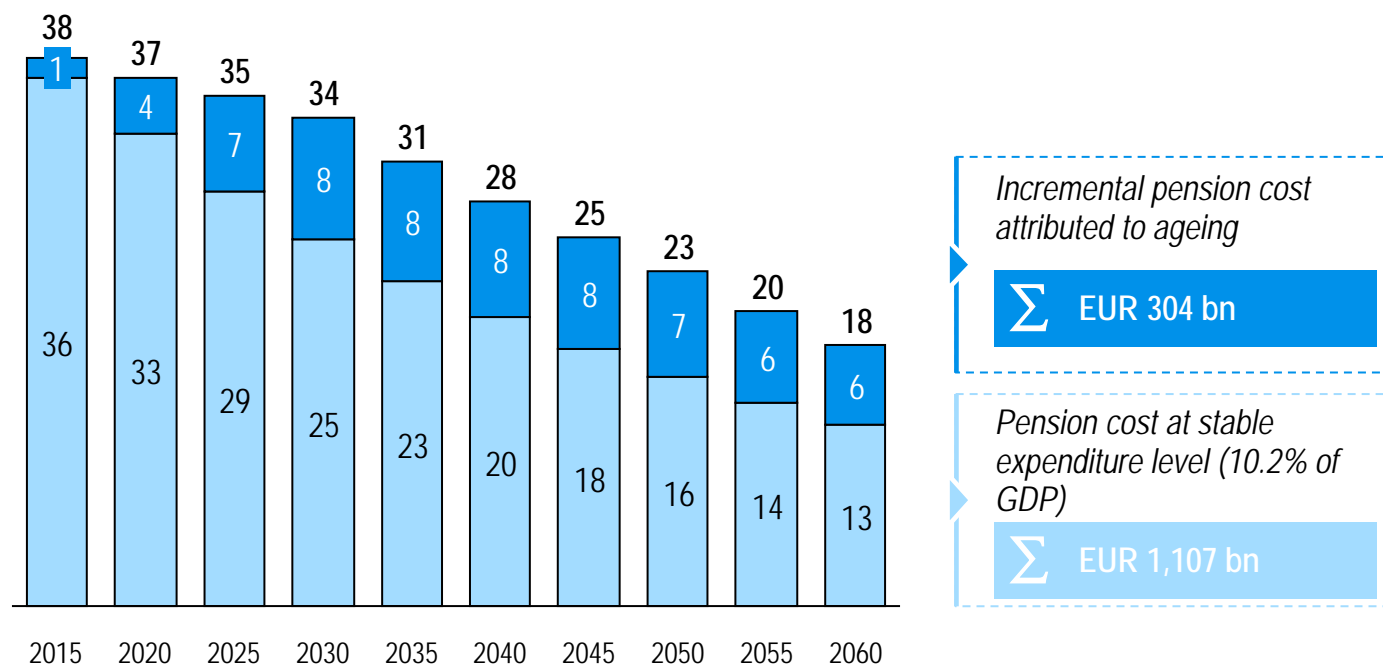
COMMENTS

- > While the government debt was steadily decreasing until 2007, the overall debt was severely impacted by the crisis (from 84% of GDP in 2007 to 100% of GDP in 2012)
- > This evolution increased the challenge for Belgian policymakers to finance the increase in social security costs

The incremental discounted pension cost caused by ageing until 2060 amounts to EUR 304 bn or 81% of Belgium's current GDP

Discounted normal and incremental pension cost

Discounted annual pension cost [EUR bn]



Assumptions Ageing Commission¹⁾

GDP growth [%]

- > 2014: 1.2%
- > 2015-2018: 1.8%
- > 2019-2030: 1.4%
- > 2030-2060: 1.6%

Pension cost [% of GDP]

- > 2018: 11%
- > 2030: 13.6%
- > 2050: 14.9%
- > 2060: 14.7%

Discount factor [%]

- > OLO (10y): 4%²⁾

■ Incremental discounted pension cost (due to ageing) ■ Discounted pension cost (without ageing effect)

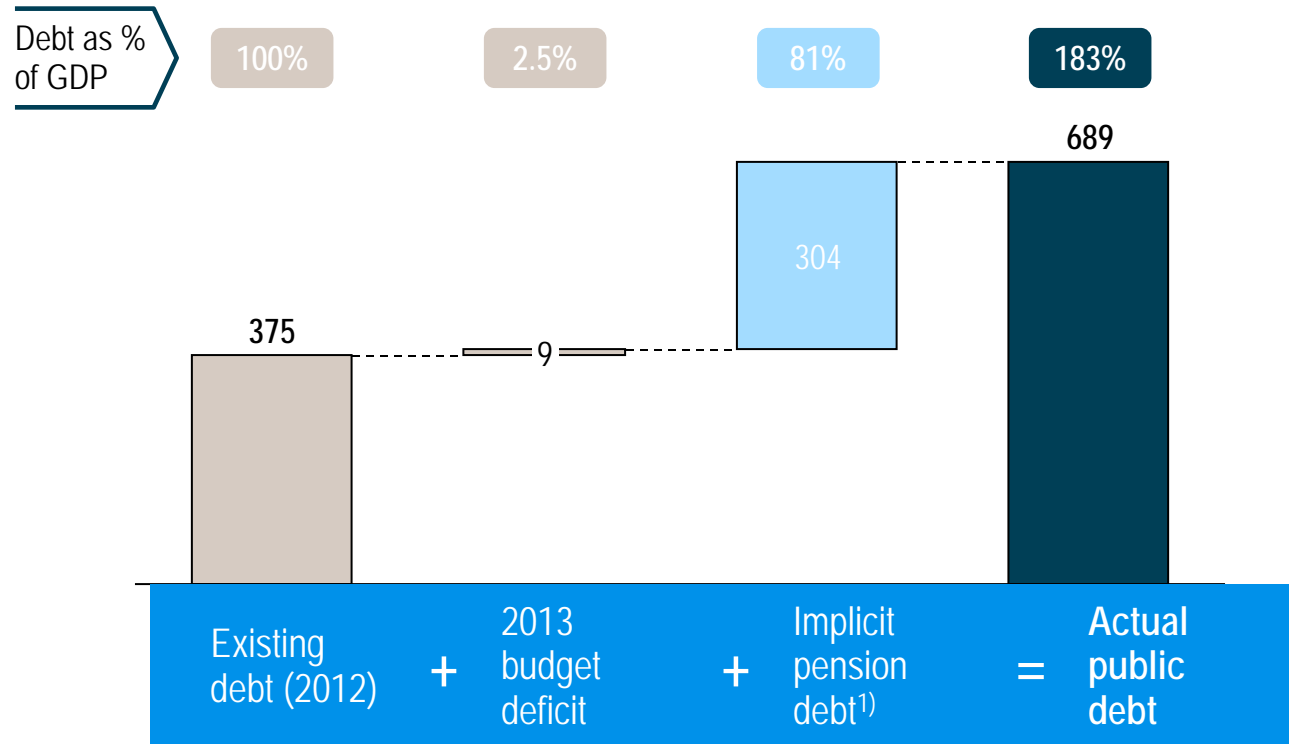
1) Assumptions used in the report of the Study Commission for Ageing

2) Average historic OLO rate

Taking into account the discounted cost of future pension commitments, Belgium has an actual public debt of 183% of GDP

Actual debt level of Belgium

Existing debt and discounted implicit pension-related debt [EUR bn; %]



CONCLUSION

- > The official government debt level ignores imbalances between future revenues and obligations
- > Given the existing pension commitments, the effect of ageing causes an **implicit pension-related debt of 81% of GDP¹⁾**
- > This leads to an **actual public debt of 183% of GDP**

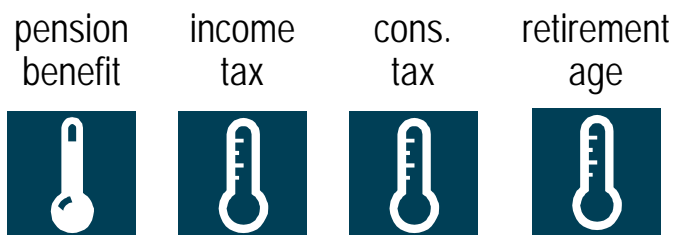
1) Based on the discounted extra pension cost created by ageing until 2060



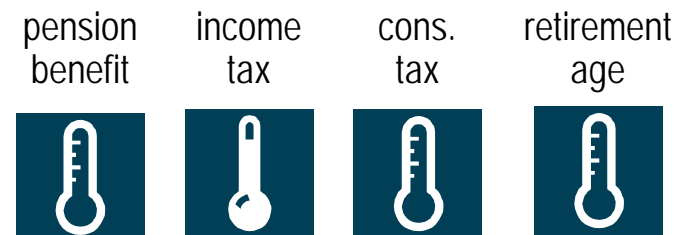
B. Strategies to cope with this cost

We investigate 4 ways to cope with the cost of population ageing

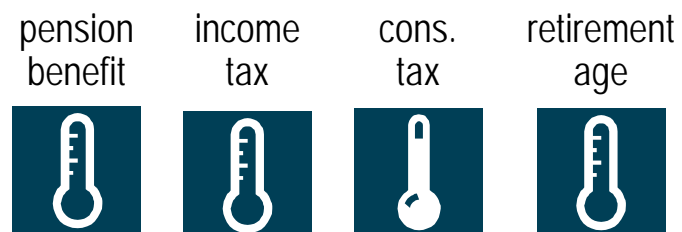
1 Decrease the pension cost?



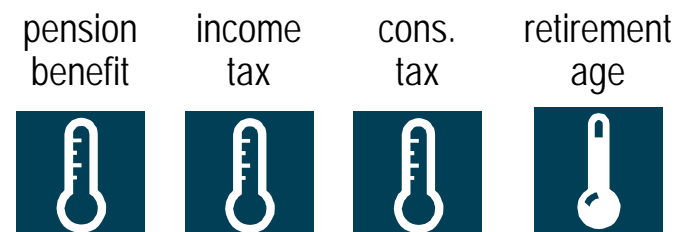
2 Increase the level of personal contribution?



3 Increase the level of consumption taxation?



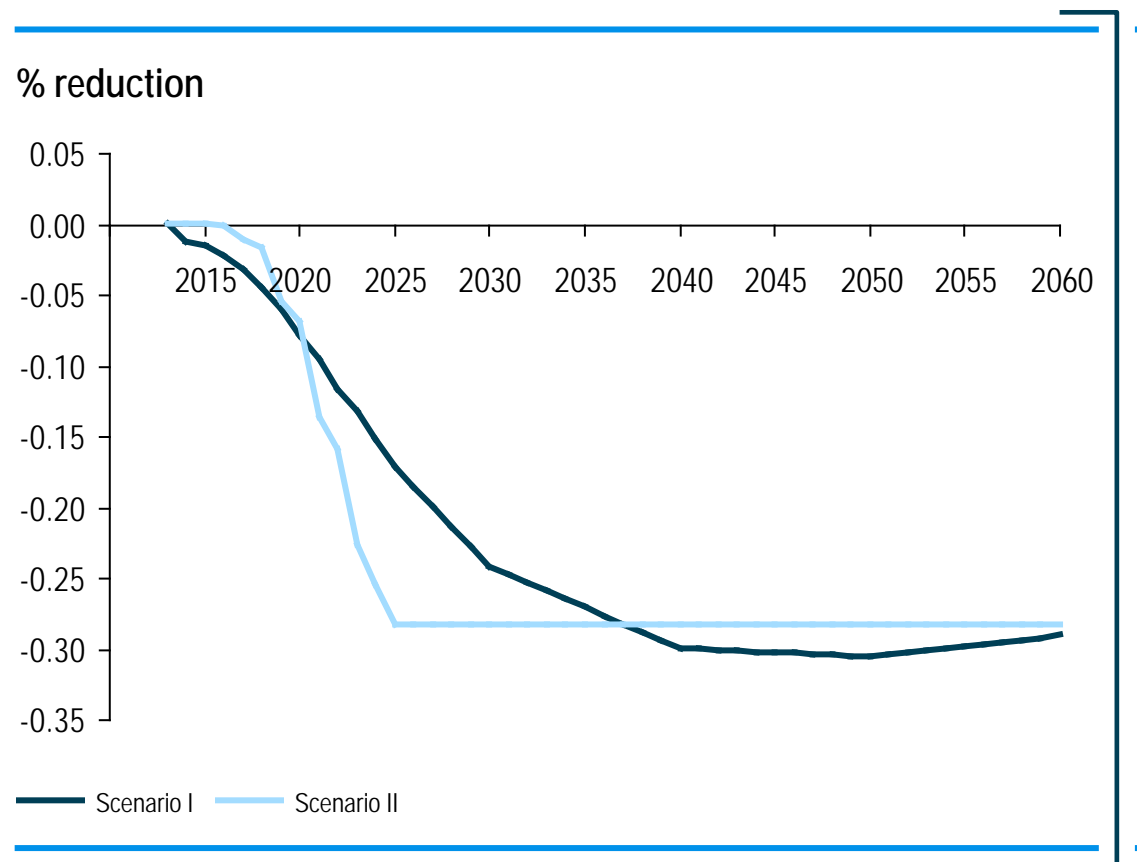
4 Increase the effective retirement age?



PRELIMINARY – FOR DISCUSSION PURPOSES ONLY

The pension cost can be kept at the level of 2013 (11% of GDP) by reducing the benefits per person substantially, each year again

Pension reduction required on annual basis¹⁾



UNACCEPTABLE

- > If all other parameters remain equal, the individual pensions will have to decrease substantially in real terms
- > Two scenario's can be distinguished:
 - **Scenario I:** An annual reduction such that the **objective of a constant relative pension cost** is reached every year (i.e. -8% in 2020, -24% in 2030 and -31% in 2050)
 - **Scenario II:** A **gradual path to a fixed reduction** such that the objective of a constant relative pension cost is reached on average (-28% from 2025 onwards)



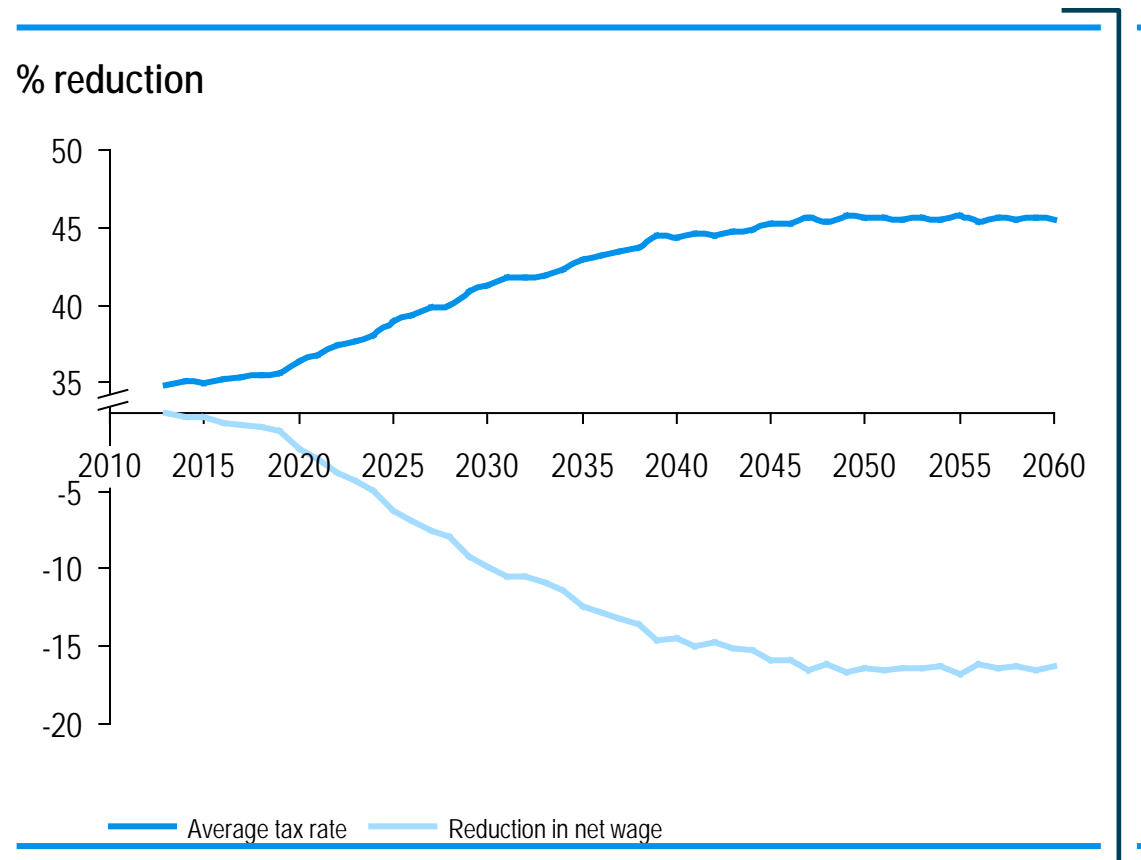
PRELIMINARY – FOR DISCUSSION PURPOSES ONLY

1) Under the restriction of an identical relative decrease in pension cost per person over the employee, independent and public sector pensions

Covering the additional cost of ageing by an increase in the personal contributions requires a net wage decrease by 9% in 2030

Increase of the average tax rate/ decrease of the net income required

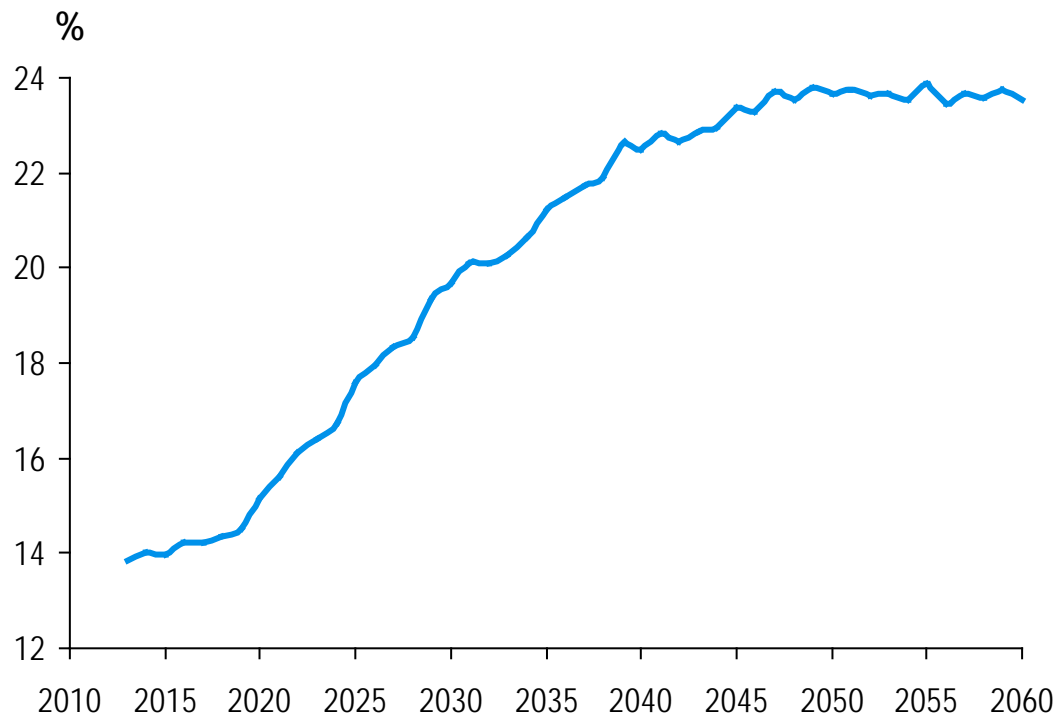
CONCLUSION



- > If all other parameters remain equal, the personal contribution will have to increase substantially to cover the total cost of ageing
- > The current average final income tax rate (after deductions etc.) for households is 26%, after an average employee contribution to social security of 9%. This implies that households on average have 65% of their income at their disposal
- > To finance the cost of ageing, the **average contribution should increase to 32% in 2030 and 36% in 2050 (this implies a decrease in real net wage of respectively 9% and 16%)**

The effective tax rate on consumption would need to increase from 14% in 2013 to 20% in 2030 to cope with the cost of ageing

Effective consumption tax rate required to cope with the cost of ageing



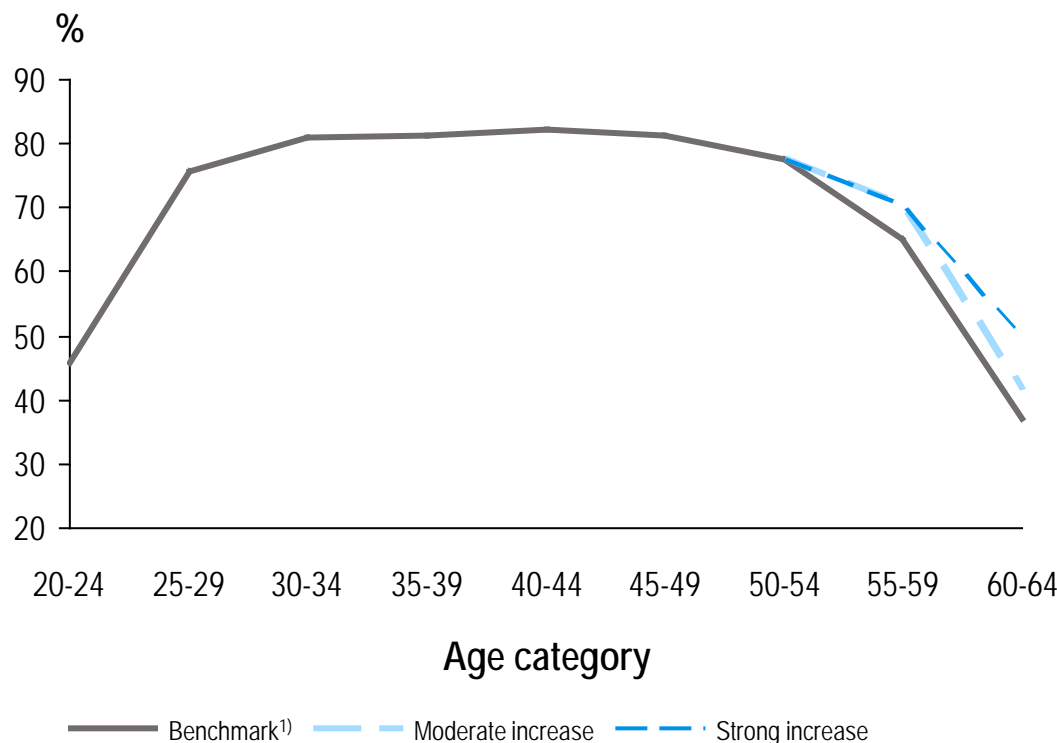
UNACCEPTABLE

COMMENTS

- > If all other parameters remain equal, the consumption tax will have to increase substantially to cover the total cost of ageing
- > We would need to go from an average VAT rate of 14% in 2013 to 20% in 2030 and 24% in 2050
- > The decrease in purchasing power for households who rely on labour income will be smaller, because the burden is now spread over all actors that consume
- > Points of attention will be the inequality caused by this increase, the effect on the index and the cost of labour

Currently, we see that despite the increasing life expectancy people are becoming inactive long before the official retirement age

Age-specific employment rate in Belgium [2020, in % of total population]



COMMENTS

- > While life expectancy has been increasing continuously, **most people are leaving the labour market early**
- > If people stay longer in the labour market, this has a **double benefit**:
 - They contribute longer to the government budget by paying taxes
 - They do not receive retirement benefits
- > We will investigate two alternative scenarios under which people from 55-64 are activated

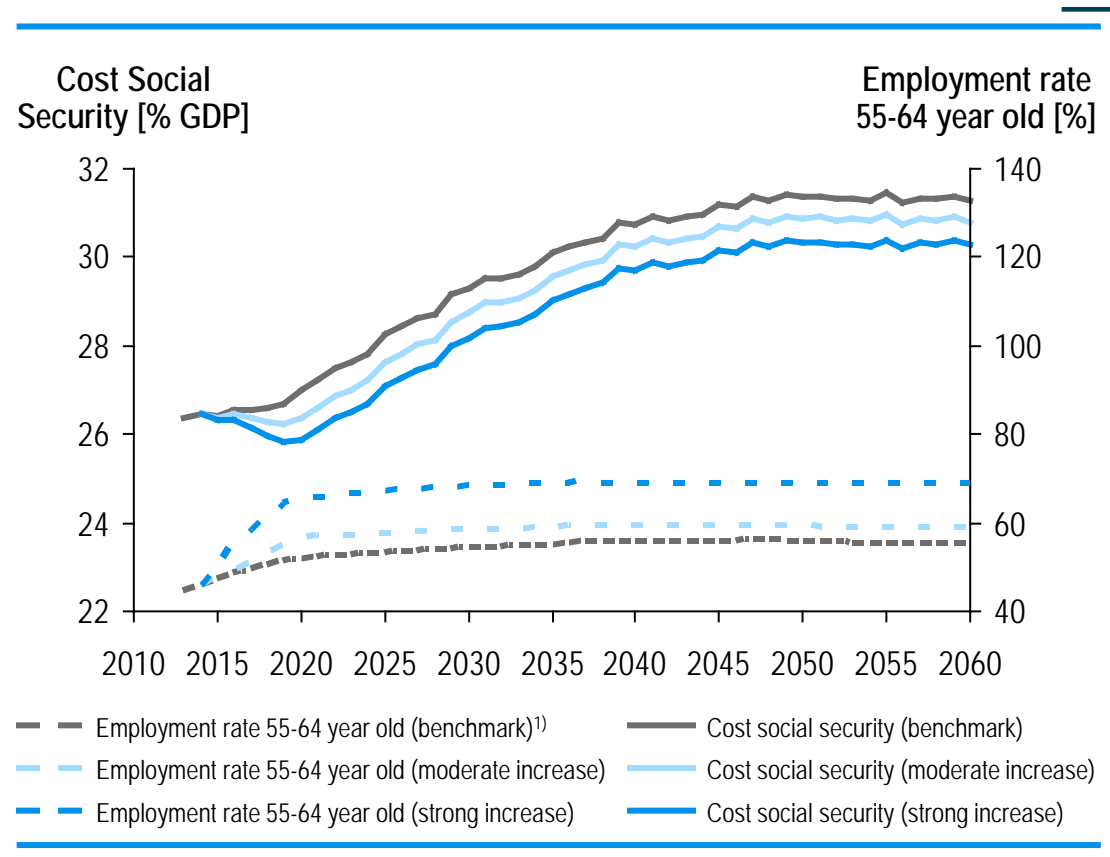


PRELIMINARY – FOR DISCUSSION PURPOSES ONLY

1) Benchmark scenario: Scenario of Hoge Raad van Financiën for 2020

Even a strong increase in the activity rate of 55-64 year has only a limited effect on the cost of ageing (-1% of GDP in 2050)

Effect of an increase of the activity rate of 55-64 year old



COMMENTS

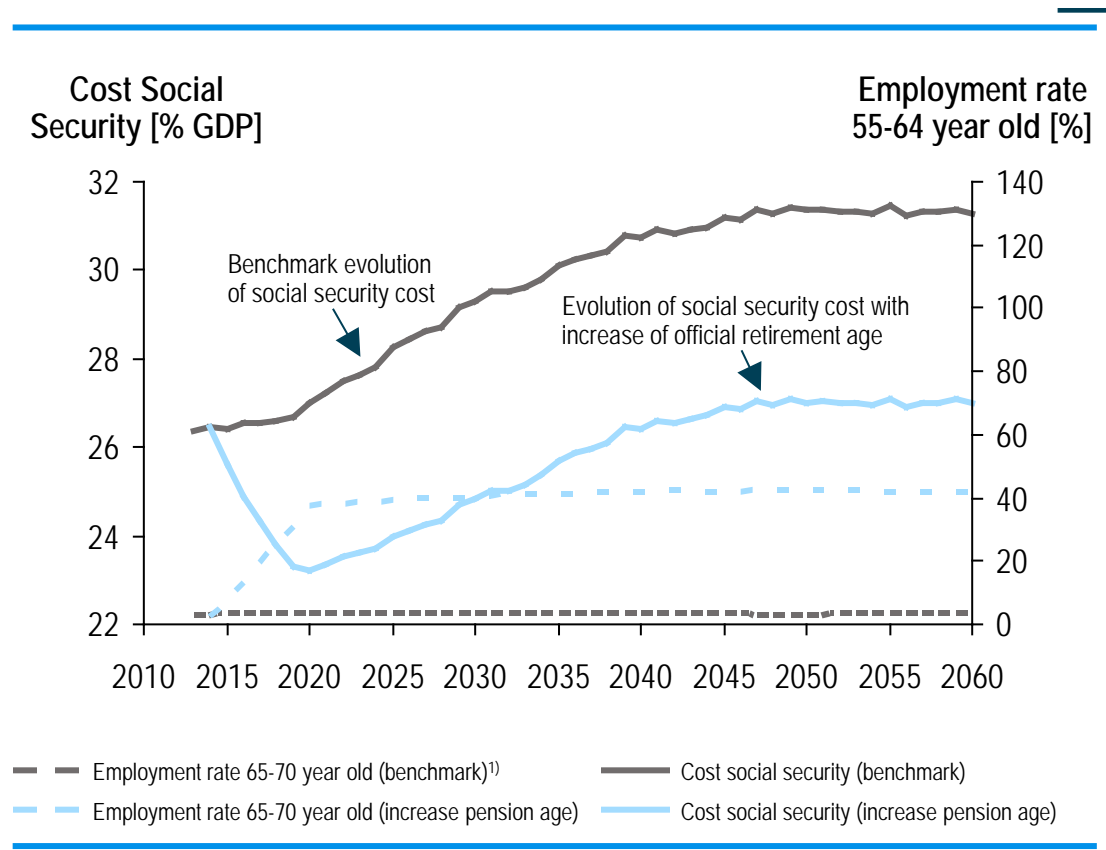
- > Under the **moderate increase scenario**, people work on average two years longer. This results in only a slight decrease of the total cost of social security (less than -1% in 2030 and 2050)
- > Under the **strong increase scenario**, people work on average four years longer. The effect is a decrease of the total cost of social security from 29% to 28% of GDP in 2030 and from 31% to 30% of GDP in 2050

Assumptions: gradual increase of activity rate, with constant age-specific unemployment rate

1) Benchmark scenario: Scenario of Hoge Raad van Financiën for 2020

A drastic measure would be to increase the official retirement age to 70 year

Effect of an activation of the 65-70 year old



UNACCEPTABLE
COMMENTS

- > This scenario, which assumes that action is taken already from 2015 onwards and that the activity rate of the 65-70 year old reaches the level of the 59-64 year old from 2020 onwards, is able to **reduce the cost of social security significantly**
- > The cost of social security decreases from 29% to 25% in 2030 to and from 31% to 27% in 2050

Assumptions: gradual increase of activity rate to level of 59-64 year old, age-specific unemployment rate of 59-64 year old

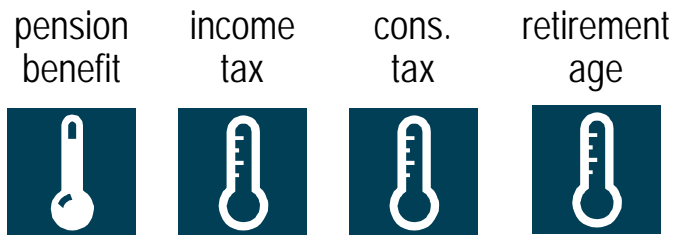
1) Benchmark scenario: Scenario of Hoge Raad van Financiën for 2020

PRELIMINARY – FOR DISCUSSION PURPOSES ONLY

We discuss 4 potential solutions that can be considered, but none of them is acceptable on a stand-alone basis

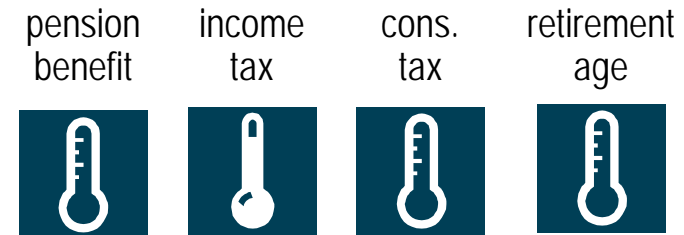
1 Decrease the pension cost?

Pension reduction required of -28% in 2030



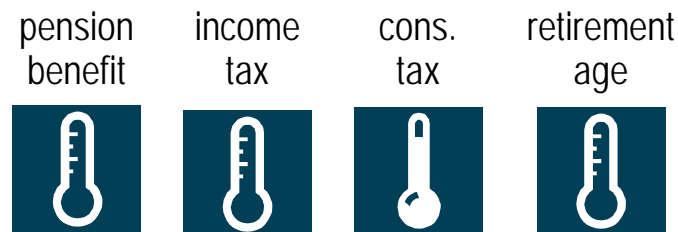
2 Increase the level of personal contribution?

Comes with a net wage reduction by more than 9% by 2030



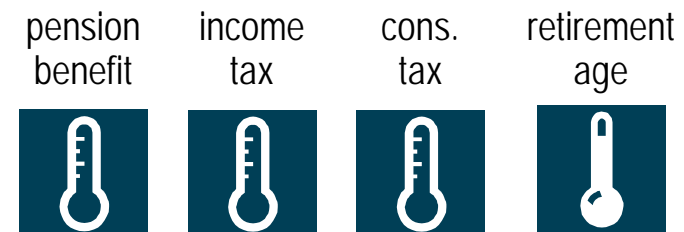
3 Increase the level of consumption taxation?

An increase of the average rate by 6% pt. is required for 2030



4 Increase the effective retirement age?

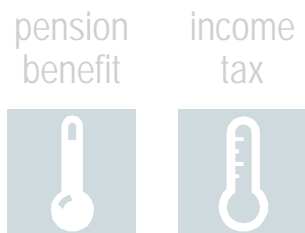
A strong increase (+4 yrs) in the official and effective retirement age is required



Therefore, we identified a balanced solution that divides the effort over many fields

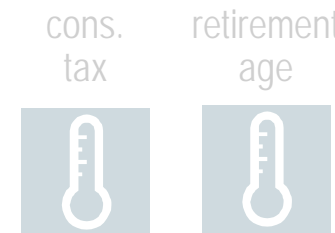
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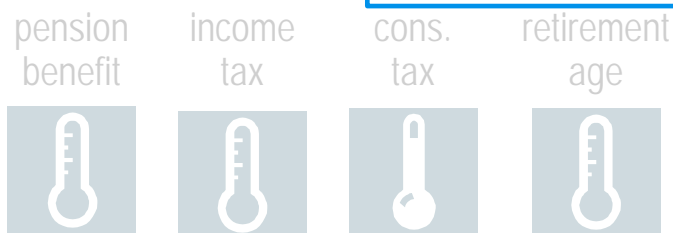
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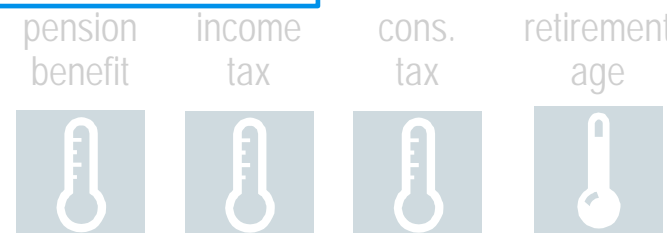
3 Increase the level of contribution?

An increase of the average rate for 2030



4 Increase retirement age?

in the official and effective



5 A balanced solution that divides the effort

A combination of measures that forms a socially acceptable solution

Diagram showing four thermometer icons representing 'pension benefit', 'income tax', 'cons. tax', and 'retirement age'.

When developing a balanced solution, many criteria were taken into account

The solution should be:

BASED ON SOLIDARITY

The burden of population ageing is too heavy for one group of society, a realistic solution with respect for all groups in society will require the involvement of the whole society

PREDICTABLE

In order to avoid shocks for the Belgian economy, to minimize distortive effects and to give people the time to adapt to and prepare for the changing environment, a pre-announced policy path should be followed

MINIMIZING THE SECOND ROUND EFFECTS

Certain policy options come with massive second round effects. For example: a strong increase of the income tax rate would undermine the competitive position of Belgium and would come with a decrease in employment.

The additional cost of ageing over the period 2015-2060 sums up to 218% of GDP, and requires initiatives in different fields

cons.
tax



A limited increase of the average consumption tax by 1% pt. will yield significant revenues that are used to cover the cost of ageing partly. The increase can be selective, as long as the average increase by 1% pt. is reached

pension
benefit



Tapering of the average real pension benefits, which can be reached by not fully adapting to inflation. The social acceptability of this measure can be guaranteed by using different reduction rates based on the size of the pension, such that small pensions can be preserved

income
tax



The increase of the personal contribution should be kept minimal given the very high level of income taxes and social contributions in Belgium, and the substantial distortive effects associated with this type of taxes

retirement
age



A very gradual increase of the official retirement age to 70 years, in combination with an activation of older workers as a form of partial indexation of the pension age to life expectancy. This measure reduces the benefits and increases the revenues at the same time.

By implementing this solution, the sustainability of both the Belgian social security system and the public finances can be guaranteed

