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Cohort specific ages of retirement

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## Points of departure

- Life expectancy increased and is expected to continue to increase  
(life-expectancy at 65 has on average increased by 45 days per year since 1990)
- The Swedish national pension system calculates the pension for each birth-cohort using current life-expectancy
- In one sense the design has abolished the notion of a formal or legal retirement age.  
(Withdrawal of earnings-related pension possible from 61, the minimum guarantee is paid from age 65 )

=> Thus, if Swedes do not work longer their pension replacement rate will necessarily decrease

# Abolishing the notion of a normal retirement age...

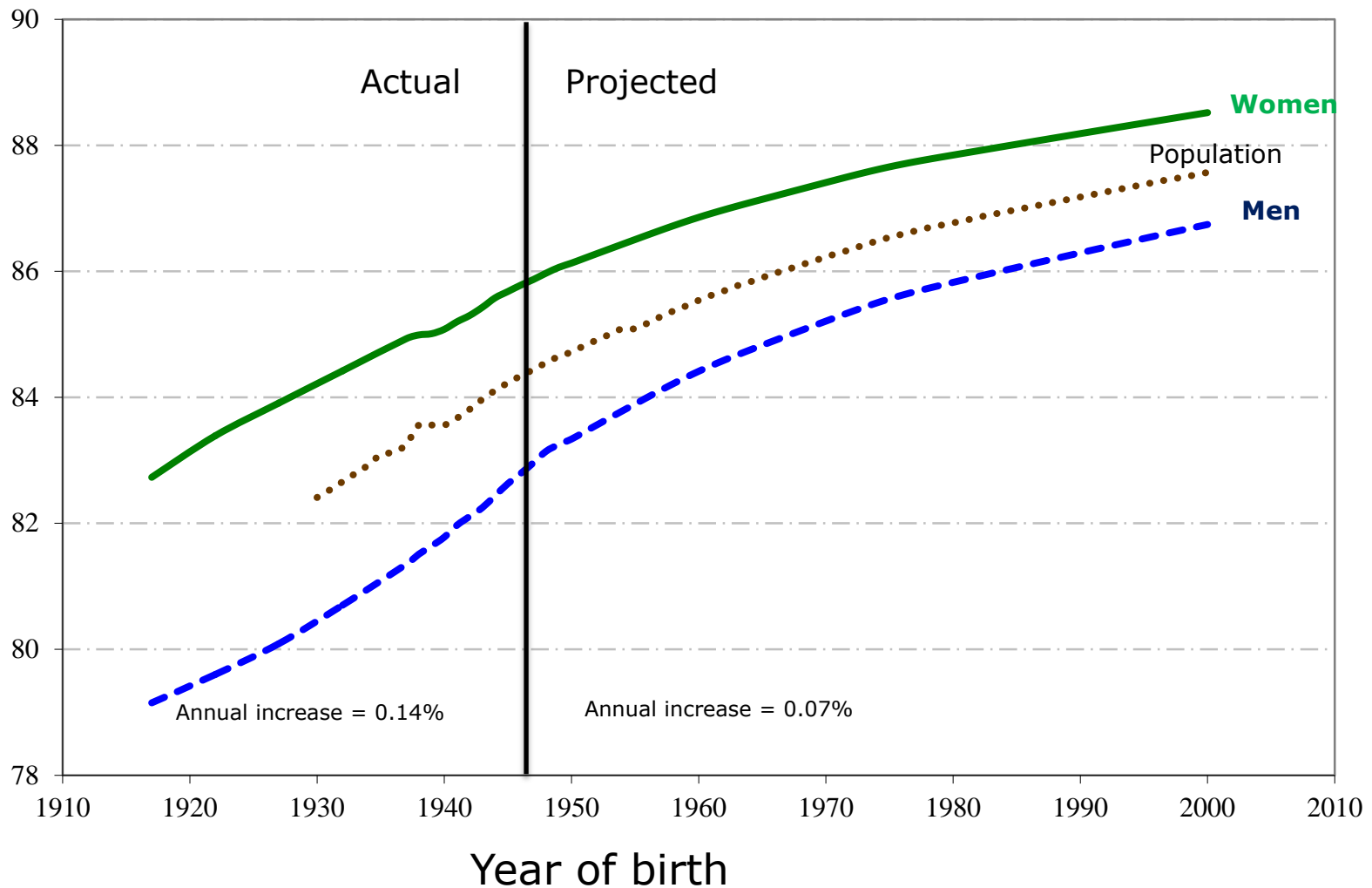
## **Advantages, relative to keep and raise the normal retirement age ...**

- Provides a mean to financially (more or less) insulate the pension plan relative to life expectancy improvements without (repetitive) political decisions on retirement age
- Reducing the social norm as when to retire may be welfare improving (a mean to liberalise and individualise the retirement decision)
- Pedagogical way to inform of the “economics” of a pension scheme (?)

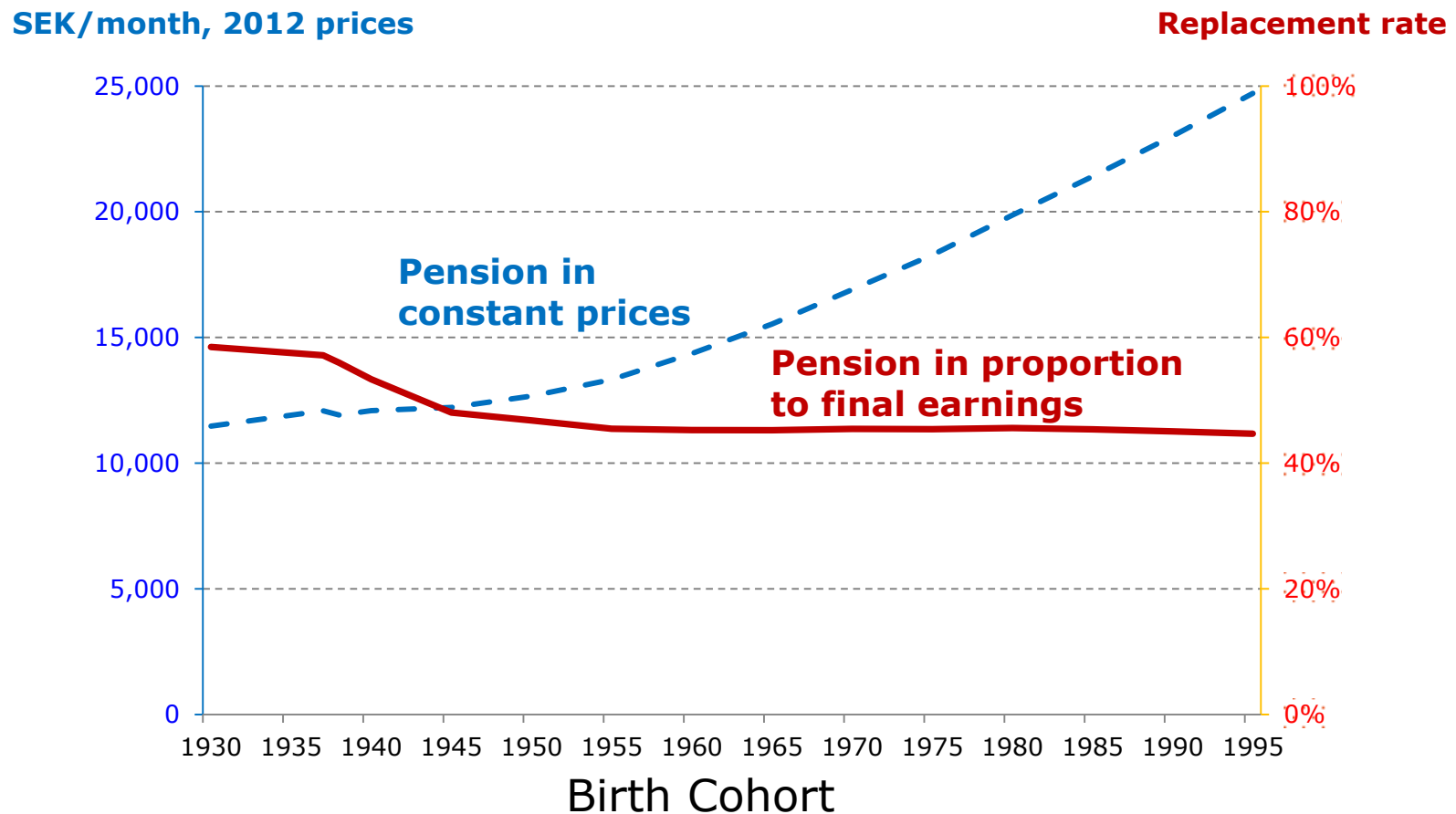
## **Disadvantages ...**

- Much weaker signal that the retirement age (which does not exist) has increased
- Difficult to assure a coherent social insurance system, for example should the age at which unemployment, disability insurance is terminated also be pegged to life-expectancy
- Difficult to inform about (?)

## Expected average life span for persons who have reached age 65



# Projected\* national pension for different birth cohorts, given a retirement age of 65



\*Projected for a "model person", described in slide 10. Assumed earnings growth 1.6 % p.a.

## Given:

- life expectancy improvements that reduce the replacement rate for each birth-cohort
- lack of formal retirement age

How should we best inform about the impact on pension of life expectancy improvements?

- The information must be short and non-technical, suited for all



## Attempted and tried (2012) information design:

- A forecast of the size of the insured's pension benefit at a "cohort-specific retirement age" has been added to the standard retirement ages (61, 65 and 70) in the yearly individual pension statement
- The cohort-specific retirement age is the age to which an insured born in YYYY needs to work in order to receive the same replacement rate that he/she would have received at age 65 if life-expectancy had remained unchanged since the new rules were decided in 1994
- The cohort-specific retirement age will not imply the same average replacement rate for all birth-cohorts

Demo Person

## Forecast for your National Public Pension

Pension age	age 61	age 65	age 68 and 1 month	age 70
Amount SEK/month	10 100	13 000	15 900	18 100

Your national public pension at age 65 (SEK 13 000) amounts before tax to SEK 10 100 income pension and SEK 2 900 premium pension. The pension will be paid for the rest of your life.

### We calculated as follows

The forecast is based on the SEK 1 044 041 you have earned towards your national public pension so far (see pension account on page 3) and your annual income until you retire. We have assumed that you will have the same pensionable income per year as in 2010, that is SEK 279 000 (see decision on page 2).

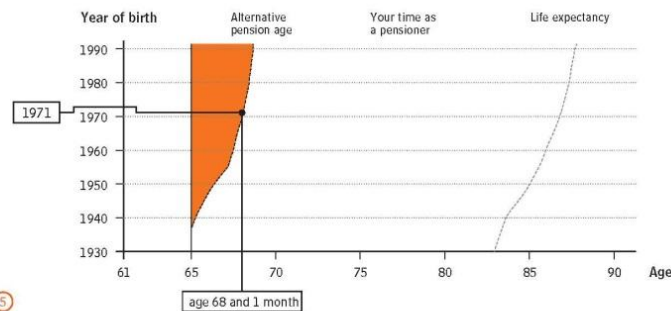
The forecast is calculated in today's value. This means that you can compare the amounts in the forecast with your current earnings. We have also assumed that your premium pension will increase at the rate of 3.5 per cent annually.

### We live longer – that affects your pension

The life expectancy of the Swedish population is rising. You, who were born in 1971, need to work until age 68 and 1 month in order to receive the same pension that you would have received at age 65 if life expectancy had remained unchanged.

### When is the best time for you to retire?

At [www.pensionsmyndigheten.se/prognos](http://www.pensionsmyndigheten.se/prognos), you can obtain forecasts that also include your occupational pension and possible private pension you will be receiving. This information will make it easier for you to plan and make the right decision about your future. The forecasts are generated in co-operation with [minpension.se](http://minpension.se).



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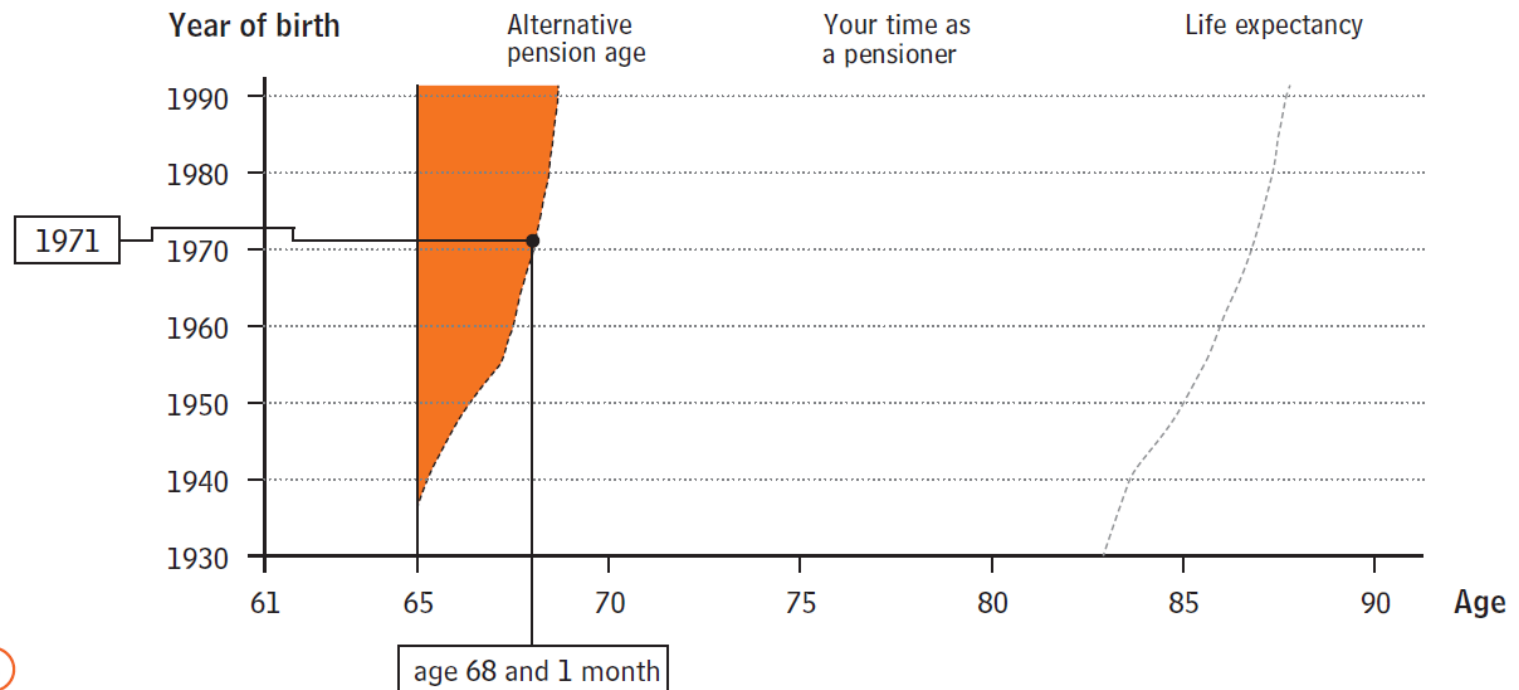


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## How has the cohort specific retirement age (CSRA) been calculated?

1. CSRA is calculated for a hypothetical model person in each cohort
2. Model persons begins to work at age 23, with earnings every year equal to average earnings, (that is a straight-line earnings career is assumed)
3. CSRA is the retirement age at which replacement rate for the model person in each cohort is equal to the replacement rate at age 65 that this model person would have had with 1994 mortality
4. Experienced mortality up to present date is used, for the future mortality the projection made by Statistics Sweden is used
5. Inkomstpension (=NDC): experienced indexation up to present date, for the future indexation follows average real earnings growth (1.6 % p.a. – this assumption does not have any impact on CSRA)
6. Premium pension (pre-funded): experienced average return of premium funds up to present date, for the future an annual real return of 3.3 % is assumed

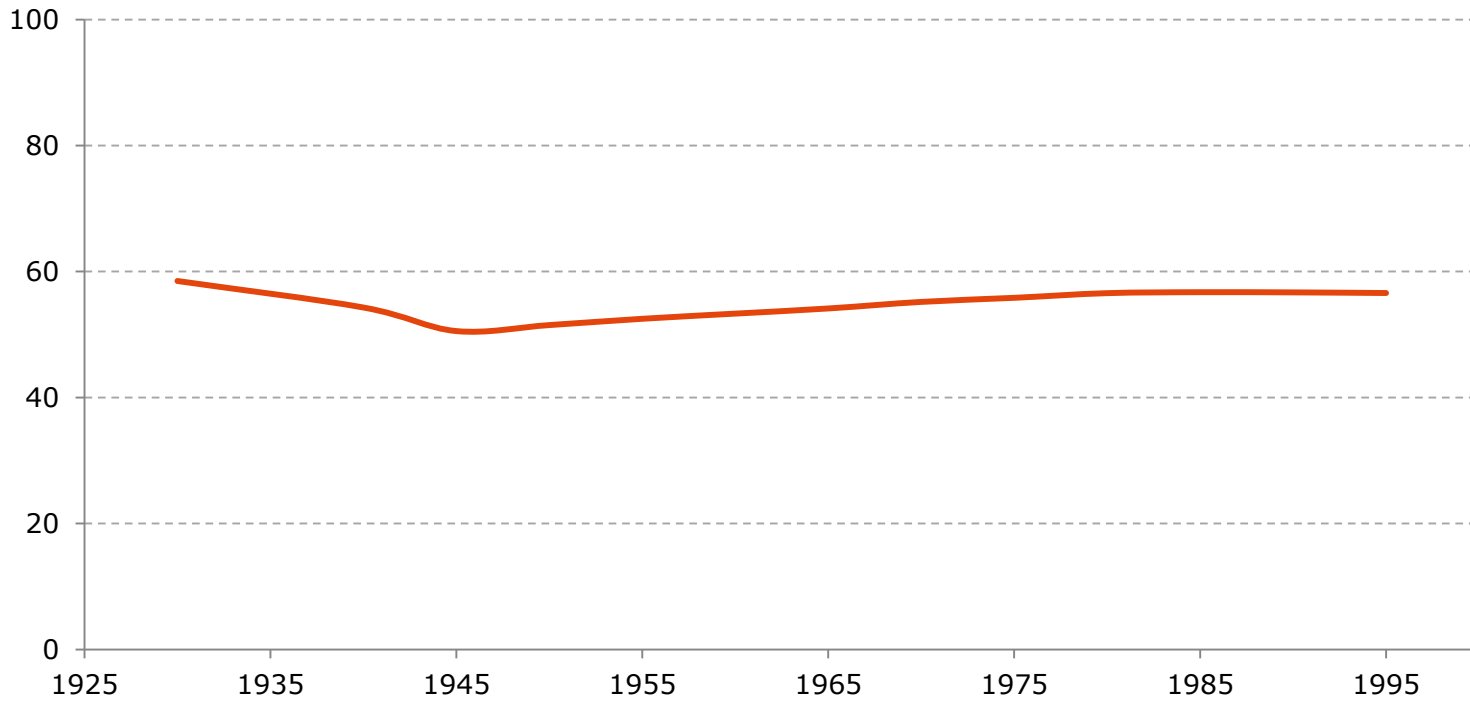
## Results: Cohort-specific retirement ages and expected period of retirement

Birth cohort	... reaches age 65 in	Cohort-specific retirement age	Retirement period*	Compared to birth cohort 1930
<b>1930</b>	1995	65 yr and 0 m.	17 yr and 5 m.	0 yr and 0 m.
<b>1940</b>	2005	65 + 2	18 + 5	1 + 0
<b>1950</b>	2015	66 + 4	18 + 8	1 + 3
<b>1960</b>	2025	67 + 6	18 + 7	1 + 2
<b>1970</b>	2035	68 + 0	18 + 9	1 + 4
<b>1980</b>	2045	68 + 5	18 + 11	1 + 6
<b>1990</b>	2055	68 + 8	19 + 1	1 + 8

\*Expected remaining life span from the cohort-specific retirement age

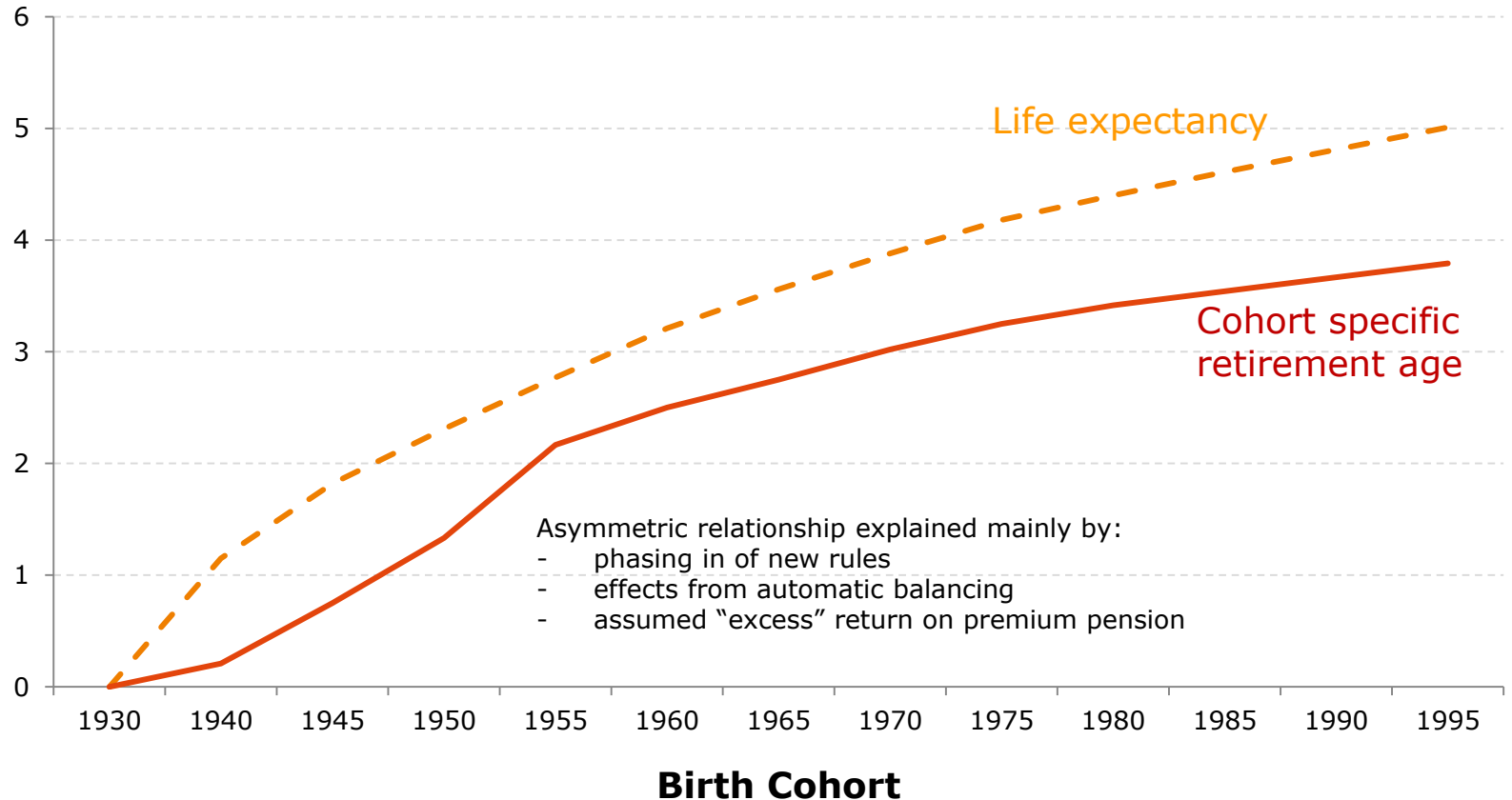
## Replacement rate at Cohort specific retirement age

**Replacement  
rate, %**



Birth cohort

# Increased life expectancy and “cohort specific retirement age”, years



For birth-cohort 1954 and later, the cohort specific retirement age implies that 2/3 of increased life expectancy is prolonged work life and 1/3 prolonged retirement

# Sensitivity of CSRA to two assumptions, months

- for birth cohort 1990

	Age of entry into the labour market		
Excess return*, premium pension	18 year	23 year	28 year
0 %	+ 3	+ 1	- 3
1.7 %	+ 2	0	- 4
3.5 %	- 1	- 3	- 6

\* Assumed real return on premium pension in excess of real income growth

## How has the information on cohort-specific retirement ages been received?

- 71 percent of the respondents who said they read the forecast said that they noticed the graph
- 42 percent of those 71 percent answered Yes to the question “Did the graph make it easier for you to understand the contents of the forecast?”
- 57 percent of those 71 percent gave a correct answer to the question “Can you, in your own words, describe what the graph showed?”



## Lessons learnt?

- Abolishing the notion of a formal retirement age involves significant information challenges
- Too early to draw firm conclusions on the information design – but it seems to have worked reasonably well
- Significant media coverage of the new information – no strong critique nor praise
- Legislation outside the earnings-related national pension scheme and occupational pensions still have 65 as the normal retirement age and 65 is still the norm for retirement in Sweden
- The method for calculating the CSRA can and will probably be criticized – next year CSRA will increase due to more positive mortality projections