

Securing Lifelong Retirement Income

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The Swedish Pension System

Compulsory system

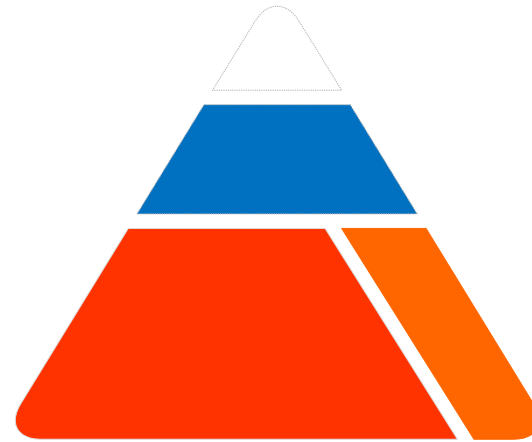
Contribution = 18.5 % of earnings

16 % to Income Pension (NDC)

- Lifetime earnings
- Benefits indexed to life expectancy changes
- Indexed by average wages
- Automatic Balancing Mechanism

2.5 % to Premium Pension (FDC)

- Funded individual accounts



- Occupational schemes for 90 % of employees
- Contribution = typically 4.5 % of earnings

Retirement

- Benefits can be withdrawn from age 61. Mandatory annuitization in the income pension and the premium pension

$$\text{Annuity} = \frac{\text{Account value at retirement}}{\text{Divisor}}$$

- The divisor is calculated from unisex life expectancy at retirement age, at an interest rate of 1.6 % in the income pension
- Guarantee pension from age 65 provides a minimum benefit and tops up the income pension for individuals with low benefits

Benefits follow economic growth

Income pension

- Accounts grow with contributions and a rate of return equal to average earnings during accumulation
- Retirement benefits are indexed annually with income growth minus 1.6 percent
- When liabilities exceed assets, balancing is activated. Benefits are indexed less than wage growth or even reduced until financial stability is restored

Guarantee benefits

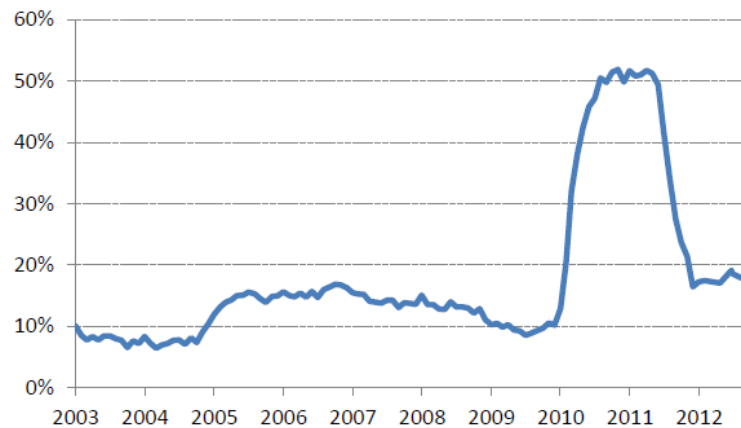
- Follow prices
- Provides some insurance for individuals with low benefits during balancing

Premium Pension Benefits Depend on Capital Markets

Premium pension

- Accounts grow with contributions and the rate of return on investments during accumulation
- At retirement, participants can choose between unit-linked insurance and traditional insurance. The default is unit-linked insurance and most participants are in the default.

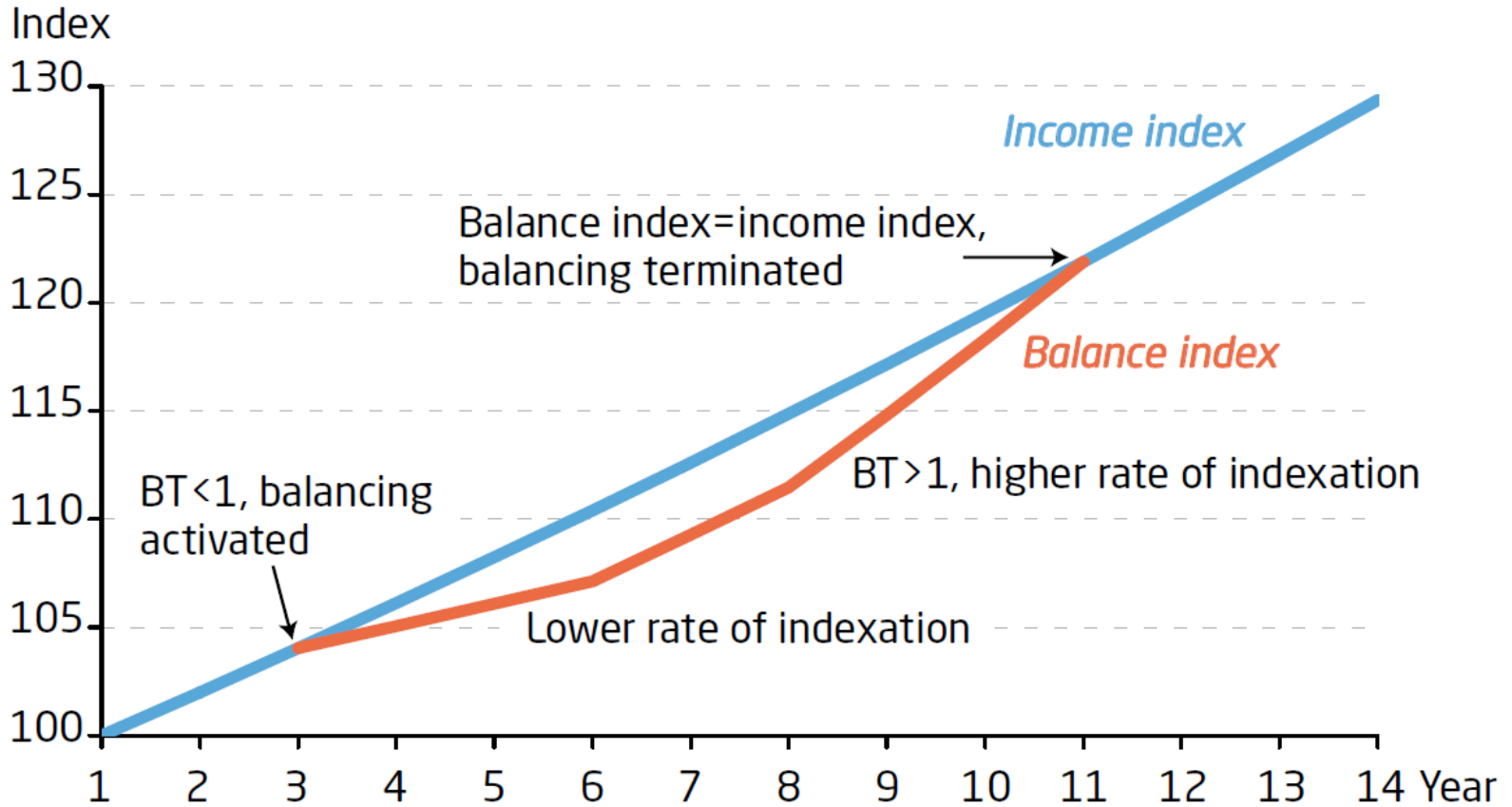
Share of participants in traditional insurance



Later Retirement Necessary to Maintain Level of Benefits

Cohort	Public Benefits at 65 (%)	Total Benefits at 65 (%)	"Necessary" Retirement Age to Adjust for Changes in Life Expectancy	Public Benefits at "Necessary" Retirement Age (%)
1930	58.5	66.3	age 65	58.5
1950	47.6	60.3	66 and 4 months	52.2
1970	46.6	60.0	68 and 1 month	56.8
1990	44.4	61.4	69 and 1 month	57.3

Balancing



Volatile Benefits from Income Pension Due to Balancing



Conclusions

- Pension system is financially stable
- Risk on participants
- Current balancing period has produced significant volatility in benefits
- Policy makers are discussing changes to indexation and the balancing mechanism