

# Workshop on International Innovations in Pension Design

7<sup>th</sup> November 2025

## Insights from Sweden's Public Pension Reform: Lessons for the UK

by

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# My research on pensions

My main research focus lies on pension systems (since 2004)

- It engages **decision-making**, **influences** policymakers and enhance **interdisciplinary** activity

	Pay-as-you-go	Funding
DB	Classical social security	Classical employee DB plan
DC	Notional accounts (NDCs)	Pension saving accounts

- **Past research:** on pay-as-you go pension schemes both DB and DC
  1. (financial) **Sustainability**, transparency
  2. Equity/**Actuarial fairness**
  3. Further on **Adequacy**

## Now:

- **Mixed pension systems**  
(pay-as-you-go + funding + optimisation elements)
- **Second/third pillar** products.



1. Description of the Swedish pension system
2. Pension reform
3. Financial sustainability: the **balance sheet**
4. Financial sustainability: the **automatic balancing mechanism**
5. **Information** provided to the individuals
6. Challenges for the Swedish pension system
7. The UK pension system
8. What can the UK learn from the Swedish pension system?

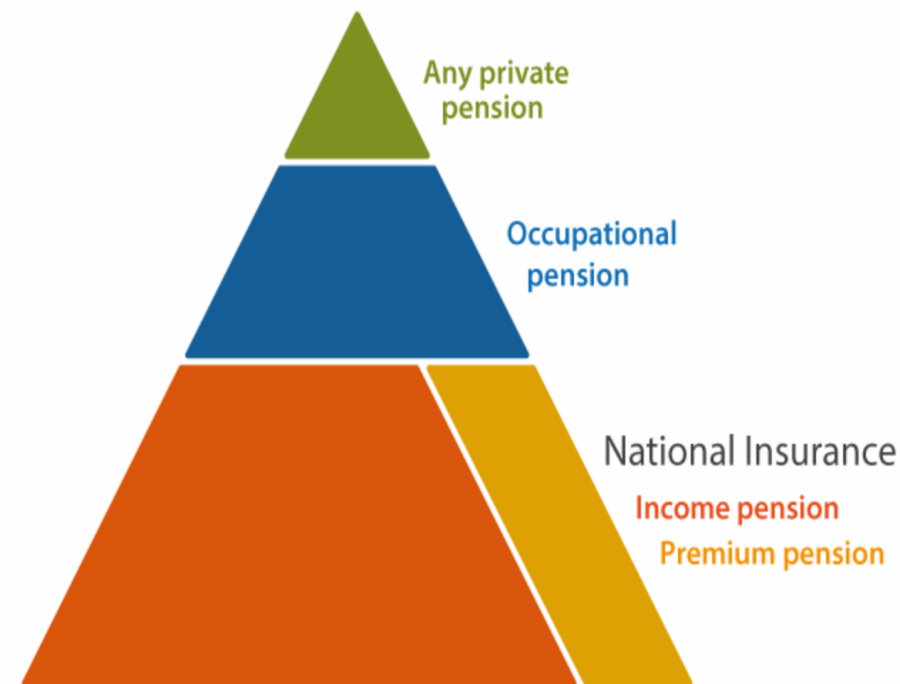
# 1. Description of the Swedish pension system

## Characteristics of the Swedish old-age pension system

- a **national public pension** from the state.

The Swedish Pensions Agency administers and pays out the national public pension (consisting of income pension and premium pension, guarantee pension)

- an **occupational pension** from your employer and
- any **savings** or assets that you may have.



# 1. Description of the Swedish pension system

## Characteristics of the Swedish old-age pension system

- a **national public pension** from the state.

**Income pension:** 16% of your pensionable income

**Premium pension:** 2.5% of your pensionable income. You can choose whether you want to invest the money through a fund selection (approx. 500) or in the state default fund

- an **occupational pension** from your employer

Most people who have worked in Sweden receive an occupational pension from their employer.

Average contribution rate 4.5% (paid by the employer)

- any **savings** or assets that you may have.

## 2. Pension reform in Sweden



a

Financial & political stability (Credibility)

b

Transparency

c

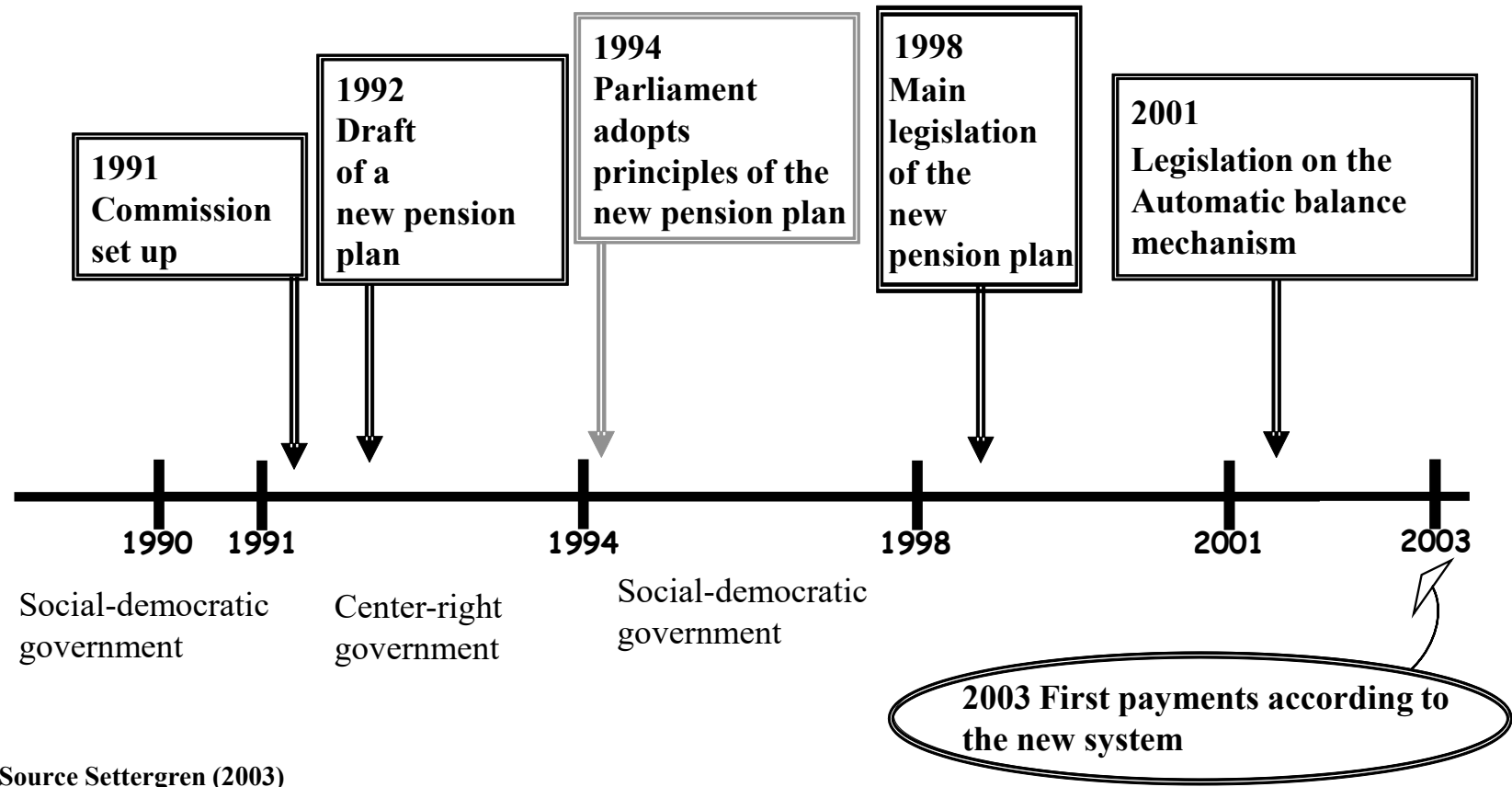
Maximize inter-generational fairness

d

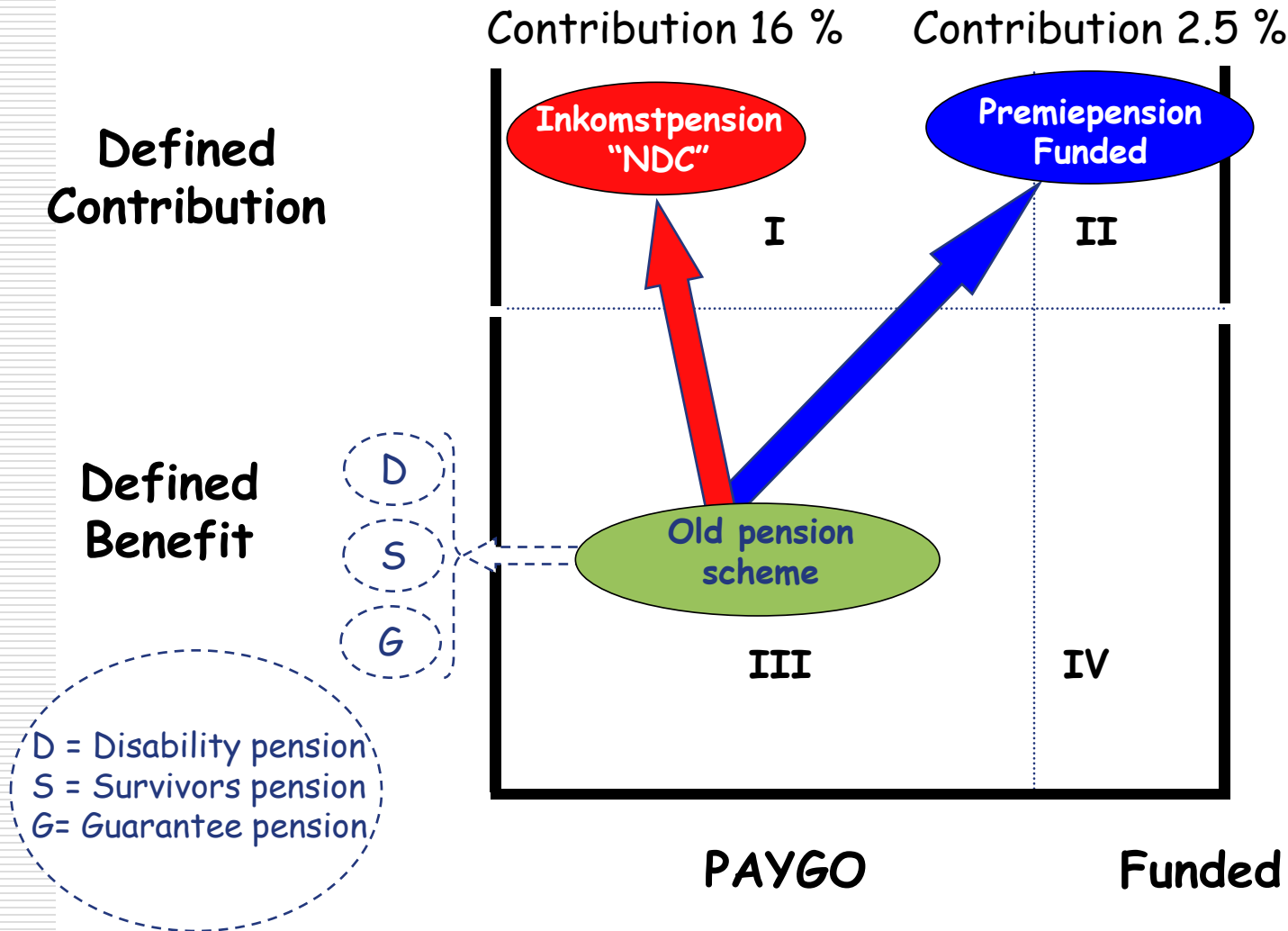
Basic income security

- |                   |   |                      |
|-------------------|---|----------------------|
| • Defined benefit | ➡ | Defined contribution |
| • 15 best years   | ➡ | Lifetime income      |
| • Price index     | ➡ | Wage index           |
| • Unfunded        | ➡ | Partly funded        |

## 2. Pension reform in Sweden

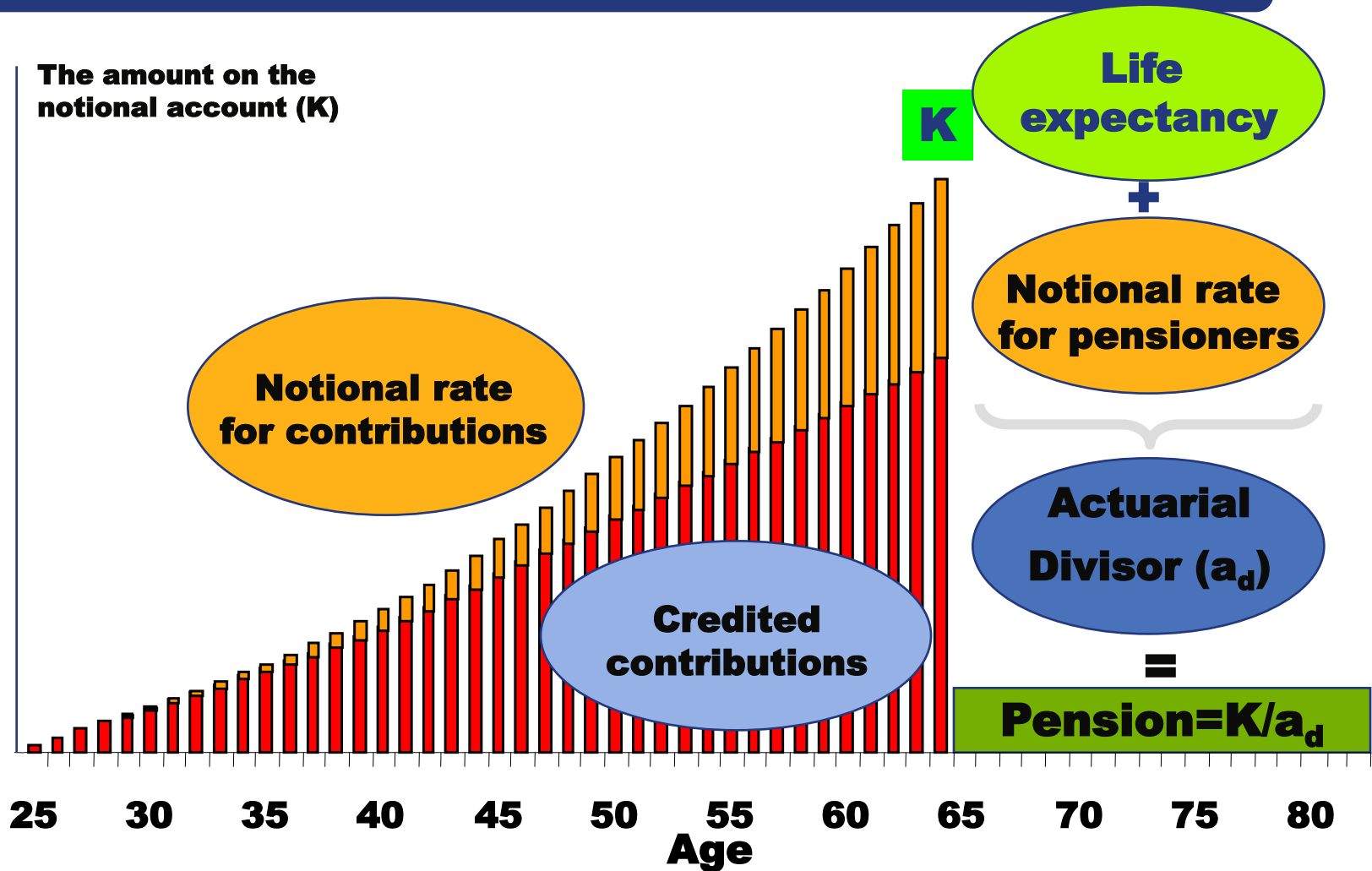


## 2. Pension reform in Sweden





## 2. Pension reform in Sweden: The notional accounts

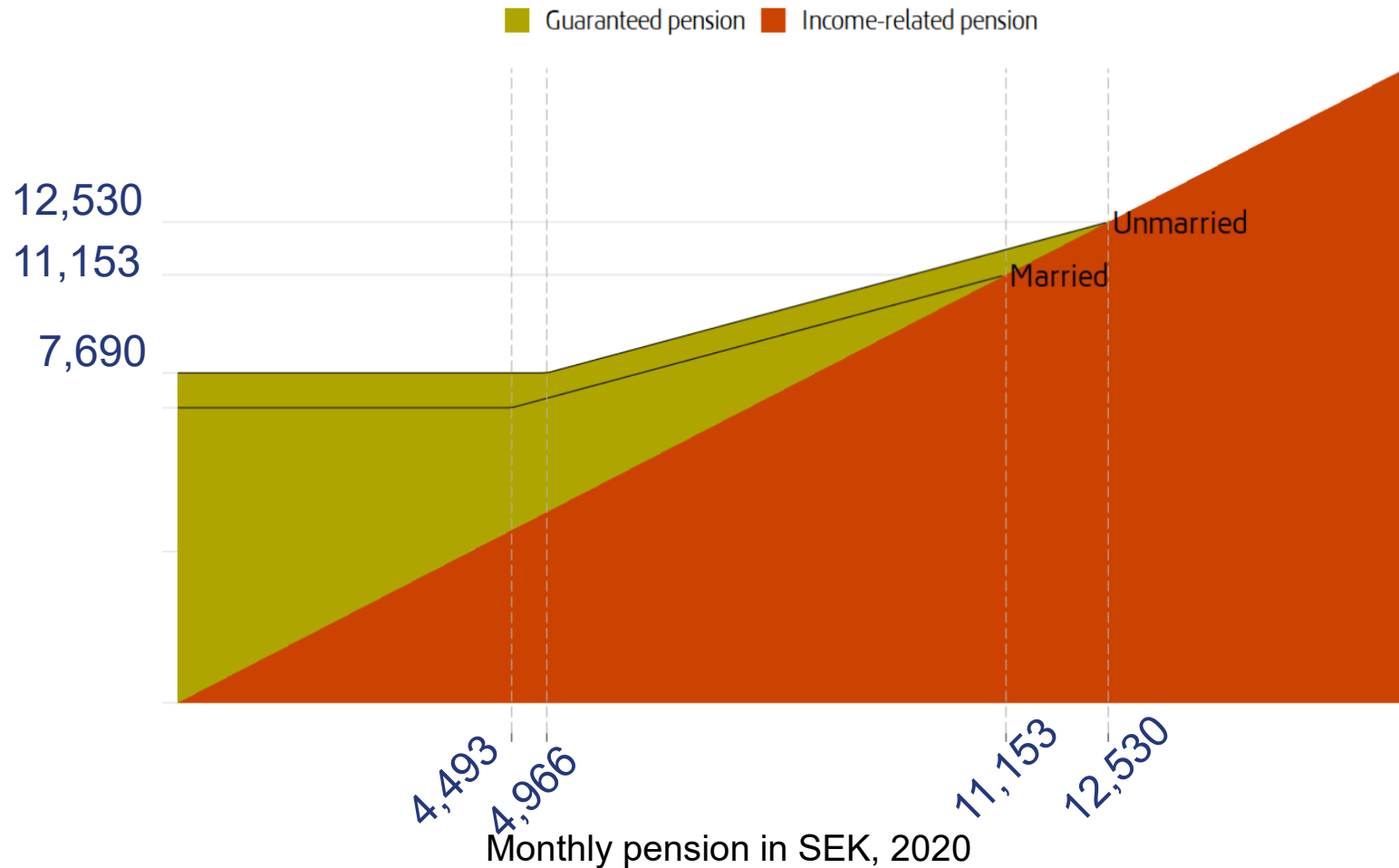


**Retirement age:** flexible between 63–69 (before from 62). Guaranteed pension age: 66 (before 65)

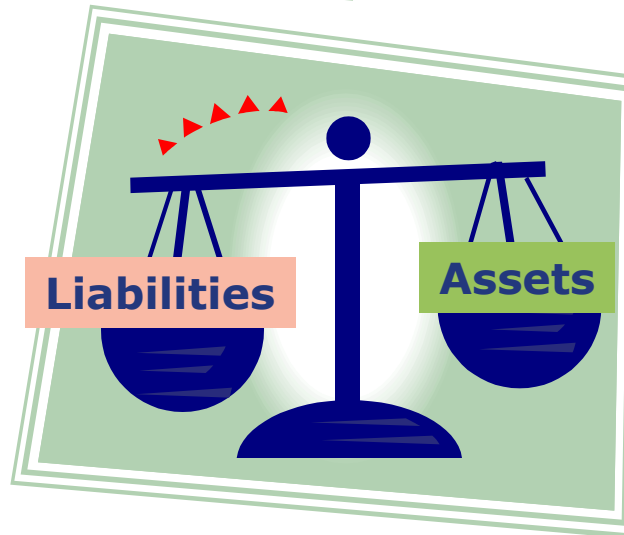
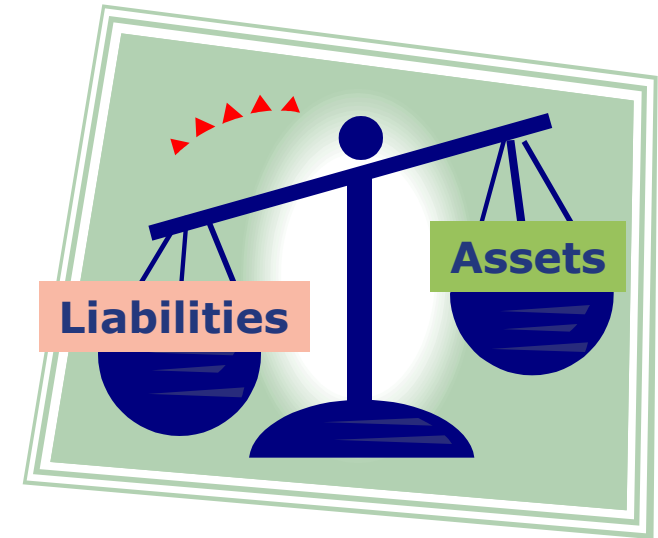
**Survivor dividend:** redistribution of notional capital from deceased participants to survivor surviving participants of the same cohort.

## 2. Pension reform in Sweden

- The guarantee is a basic security financed with general tax revenue.
- Inkomstpension supplement introduced in 2021 (top-up benefit) – added on the earnings-related pension



### 3. Financial sustainability: The balance sheet



### 3. Financial sustainability: The balance sheet



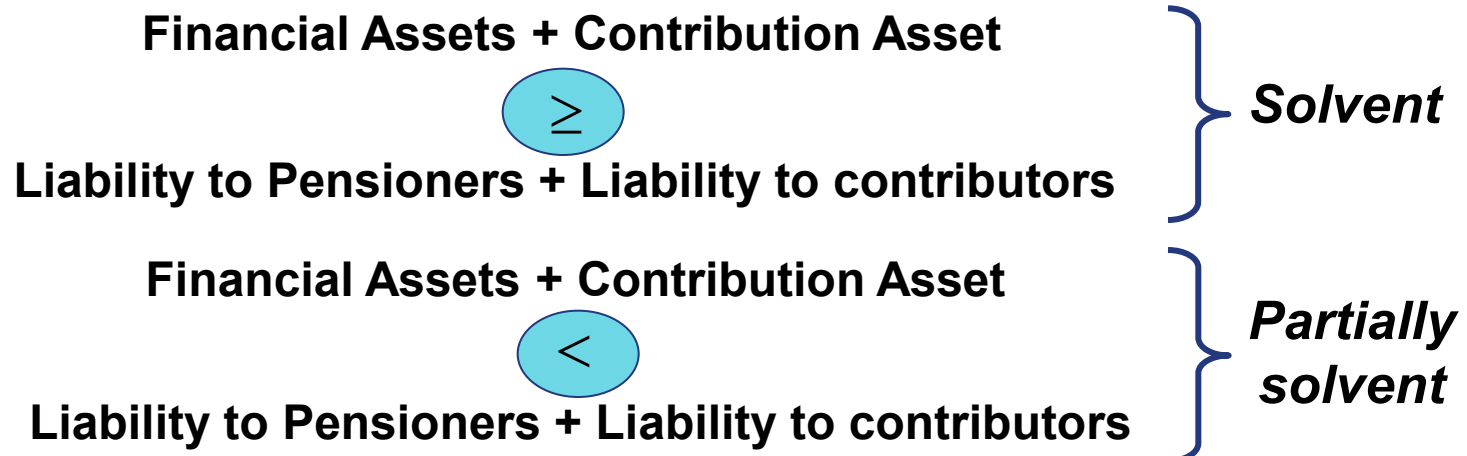
#### • Actuarial Balance sheet •

Financial statement listing the pension system's obligations towards contributors and pensioners at a particular date, with the amounts of various assets which back up these commitments. (2001)

- Traditional structure of accounting balance sheet
- Not dependent of market interest rate
- For assets the “Contribution Asset” is calculated from cross-sectional facts

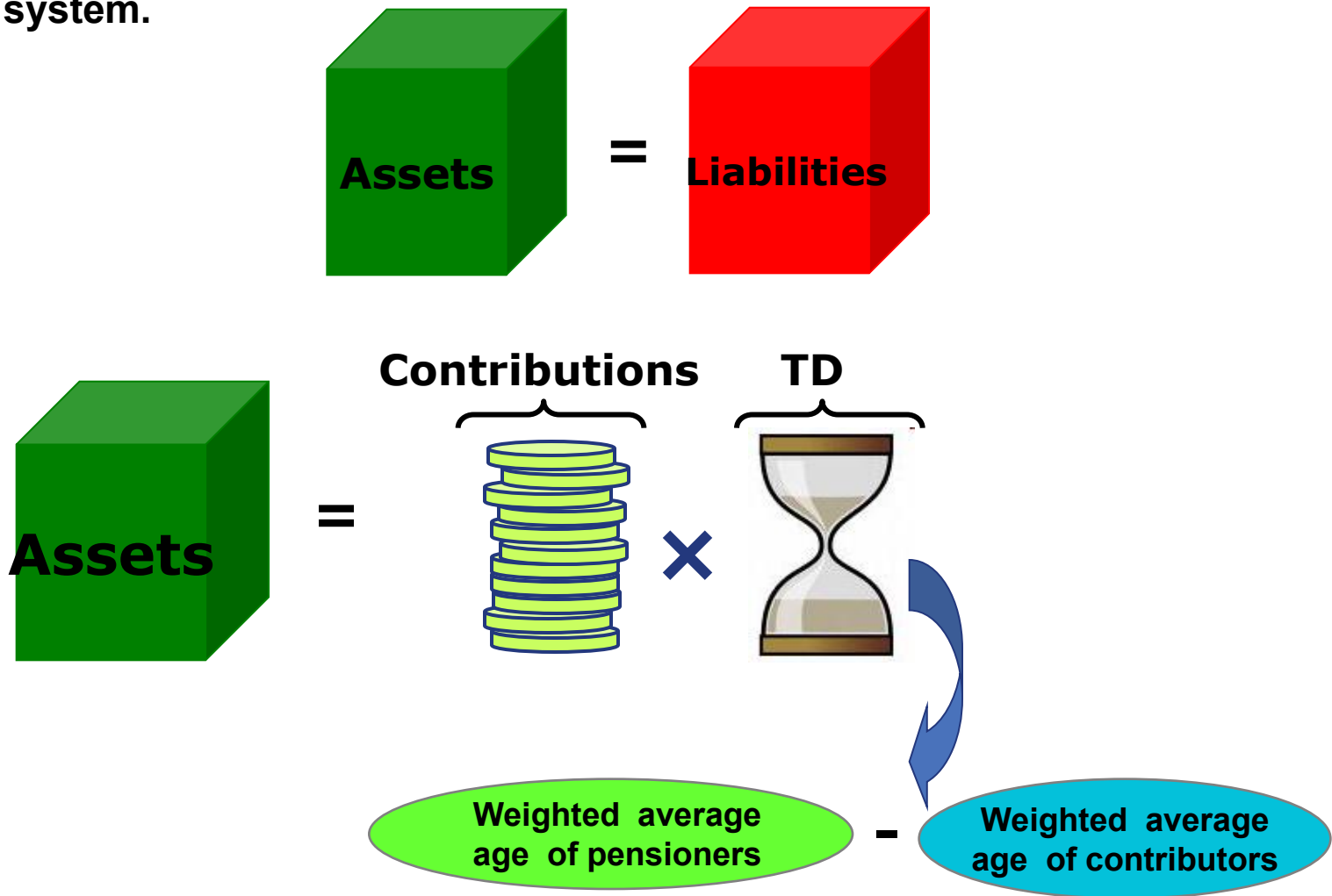
### 3. Financial sustainability: The balance sheet

ASSETS	LIABILITIES
Financial Assets	Liability to Pensioners
<b>Contribution Asset</b>	Liability to Contributors
Accumulated Deficit	Accumulated Surplus
<b>TOTAL ASSETS</b>	<b>TOTAL LIABILITIES</b>



### 3. Financial sustainability: The balance sheet

The Contribution Asset is derived from linking the assets and liabilities of the pension system.



### 3. Financial sustainability: The balance sheet

Billions of SEK

Year	2007	2008	2010	2015	2018	2020
Buffer fund, mean value		821	810			
Buffer fund	898	707	895	1,230	1,383	1,696
Contribution asset	6,116	6,477	6,575	7,457	8,244	8,893
<b>Total assets</b>	<b>7,014</b>	<b>7,184</b>	<b>7,470</b>	<b>8,687</b>	<b>9,627</b>	<b>10,589</b>
<b>Pension liability</b>	<b>6,996</b>	<b>7,428</b>	<b>7,367</b>	<b>8,516</b>	<b>9,164</b>	<b>9,783</b>
Deficit/surplus (assets-liabilities)	18	-244	103	171	463	806
Balance ratio (pre 2007)	1.0026	0.9672	1.0140	1.0201	1.0505	1.0824
Balance ratio (mean buffer fund)		0.9825	1.0024			
Damped balance ratio				1.0067	1.0168	1.0275

**Y 2024**  
**1.1695**

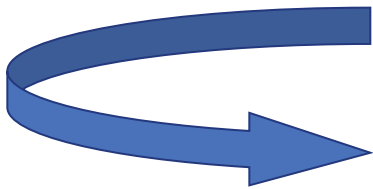
Pensions were reduced in 2010, 2011 and 2014

## 4. Financial sustainability: The Automatic Balancing Mechanism (ABM)

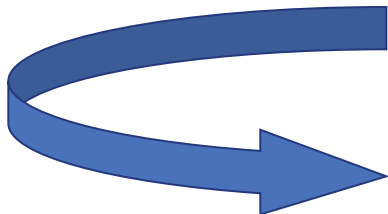
ABM: It is a **set of predetermined measures** established by law to be applied immediately as required according to the **solvency indicator**.



$$\text{Balance ratio} = \frac{\text{Assets (Financial + Contribution Asset)}}{\text{Pension liabilities}}$$



- ☐ To measure whether the system can fulfil its obligations
- ☐ To decide whether the ABM should be applied



$$\text{Balance ratio} < 1$$

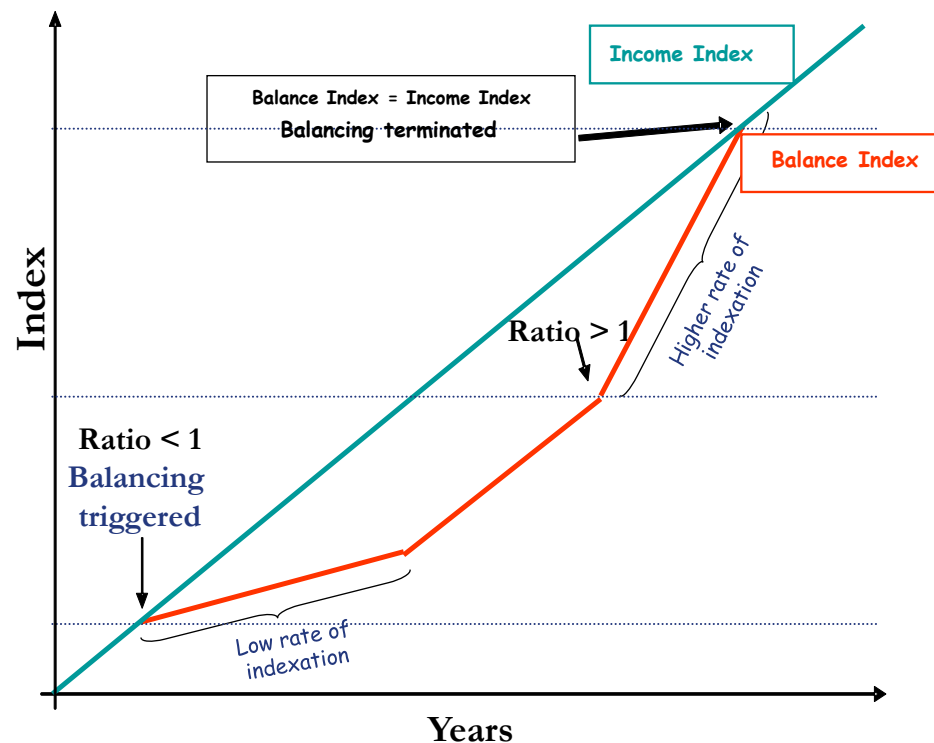
**AUTOMATIC BALANCE MECHANISM**



## 4. Financial sustainability: The ABM

### The Swedish model

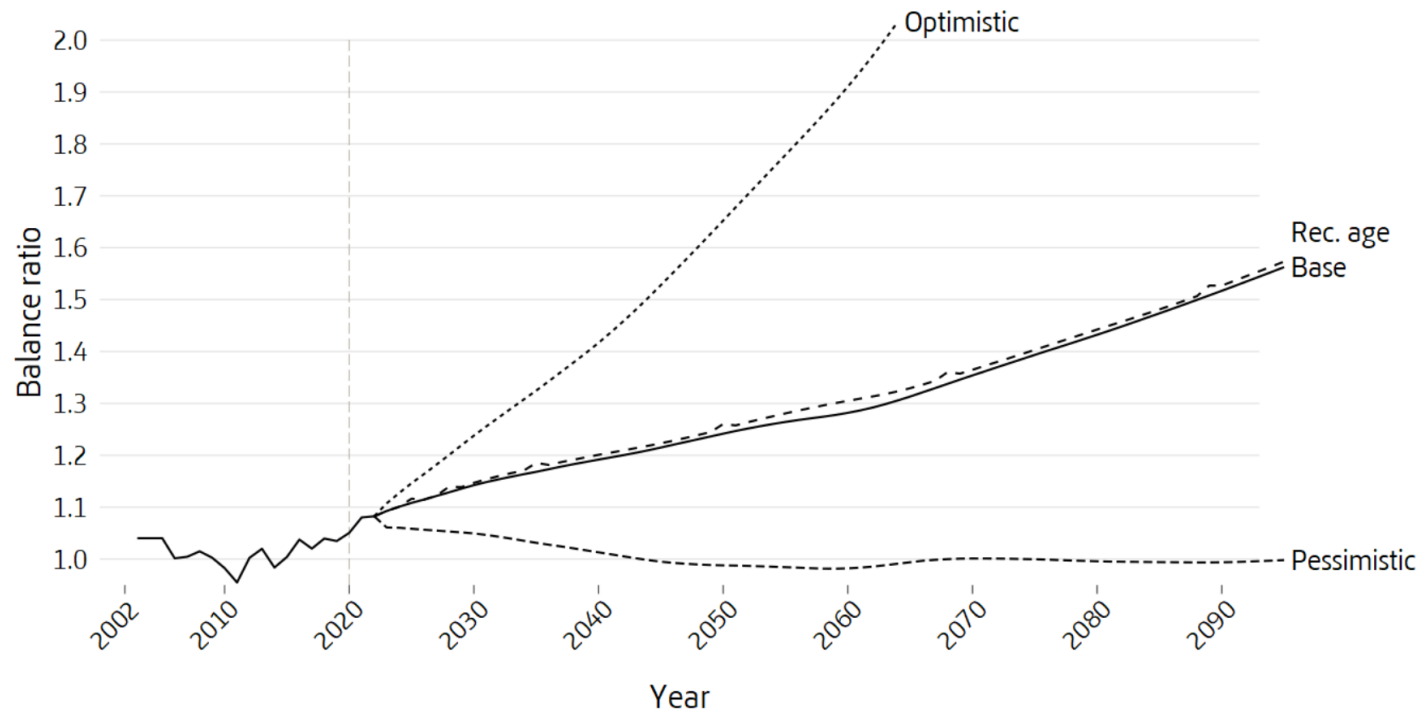
$$\text{Solvency Ratio} = \frac{\text{Assets (Financial + Contribution)}}{\text{Pension Liabilities}}$$



**Aim: to reduce the growth in pension liabilities**

## 4. Financial sustainability: Scenarios

**Balance Ratio (Historical evolution and scenarios)**  
2020 Swedish Orange report



(Contribution asset + buffer fund) / pension liability

# 5. Information provided to the individuals

## Channels of communication

- Accounting information: The **Actuarial Balance Sheet**
  - Individual information to the participants: The **Orange Envelope**
- General pension information, Premium pension account, Pension forecast

Annual Statement 2025

PENSIONS  
MYNDIGHETEN

2014

You have earned this much towards your National Public Pension

### Your Pension Accounts

Changes during 2024 in SEK	Income Pension	Premium Pension
Value 2023-12-31	1 252 268	413 197
Pension entitlement for 2022	61 776	9 652
From deceased contributors	940	225
Administration and fund fee	- 465	- 1 941*
Change in value	34 181	63 051**
Value 2024-12-31	1 348 699	484 184

\* Including SEK 2704 discount on the fund fee for 2023.

\*\* Including SEK 96 as interest on your pension entitlement for 2023.

### Your Premium Pension

Premium Pension account 2024-12-31	Value, SEK	Change in value, per cent	Fund fee, per cent	Chosen allocation, per cent	Current allocation, per cent
Equity Fund Sverige	152 895	8	0,25	30	32
Equity Fund Global	270 540	23	0,31	25	46
Interest Fund Sverige	25 457	5	0,10	25	5
Generation Fund	46 617	15	0,11	10	10
Pharmaceutical Fund	38 674	9	0,40	10	8
Total	484 184	15,4	0,27	100	100
The average pension saver		23,4	0,12		

### Fund fee

Keep in mind that high fees will have a negative effect on the performance of your savings.

### Switching funds

In order to increase security for you, all fund switches are to be made by logging in to pensionsmyndigheten.se with your electronic identification or Mobile BankID.

## How much will you get per month?

### Forecast for your National Public Pension

Retirement age	age 61	age 65	age 68 and 3 month	age 70
Amount SEK/month	10 300	13 100	16 000	18 500

Your national public pension from age 65 (SEK 13 100 per month before tax) is estimated at SEK 9 800 in income pension and SEK 3 300 in premium pension. The pension will be paid out for the rest of your life.

**We calculated as follows.** The forecast is based on the SEK 1 025 977 you have earned towards your national public pension so far and your annual income until you retire. We have assumed that you will have the same pensionable income per year as in 2012, that is SEK 303 300.

The forecast is calculated in today's value. This means that you can compare the amounts in the forecast with your current earnings. The forecast is developed in accordance with the pension industry forecast standard. Read more on [www.pensionsmyndigheten.se/prognosstandard](http://www.pensionsmyndigheten.se/prognosstandard).

**Why 68 years and 3 months?** The life expectancy in Sweden is rising. You, who were born in 1973 need to work until the age of 68 years and 3 months to receive the same pension amount you would have received at age 65 if life expectancy had remained unchanged. Your pension is calculated as your account value divided by the average remaining life expectancy of your age class.

**When is the best time for you to retire?** At [www.pensionsmyndigheten.se/B3](http://www.pensionsmyndigheten.se/B3), you can obtain forecasts that also include your occupational pension and possible private pension. The forecasts make it easier for you to plan and make the right decisions about your future. The forecasts are generated by Minpension.se, a collaboration between the Swedish Pensions Agency and the private pension companies.

## 6. Challenges for the Swedish pension system

### 1) **Good features**

- The Swedish pension system provides an extraordinary level of information of the individuals (Orange envelope, actuarial balance sheet)
- The ABM makes the system financially sustainable. This ABM is linked to a solvency indicator (i.e. the balance ratio)

### 2) **Changing** into the system's **rules**

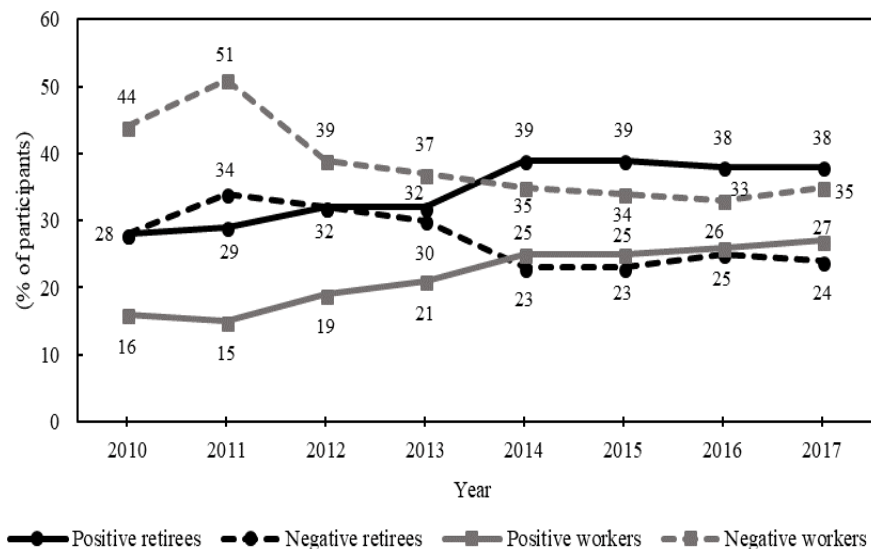
- Changes to the rules to calculate the balance ratio (balance ratio with mean buffer fund, dumped balance ratio)

3) To **insulate government finances** from the development of the public pension plan was **not achieved** – A policy response to the reduced pensions was to cut taxes on pension.

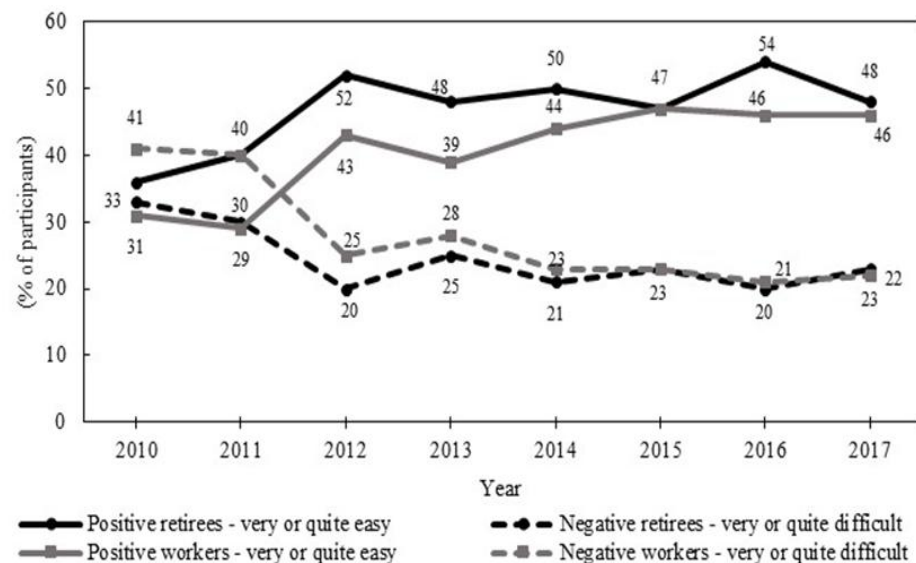
## 6. Challenges for the Swedish pension system

### 4) Information versus understanding

Level of confidence in the Swedish Pension System



Self-reporting understanding of the Swedish pension system



Source: Boado-Penas et al (2019), based on Annual Orange Envelope Survey

## 7. The UK pension system: State Pension

The full new [State Pension](#) is **£230.25** per week for 2025/26. For a full State Pension 35 qualifying years are necessary.

Forecasts of the State Pension can be found at [gov.uk](https://gov.uk)

### Check your State Pension forecast

Use this service to find out:

- how much State Pension you could get
- when you can get it
- if you can increase it
- how you could increase it (for example, by paying to fill gaps)



**You can get your State Pension on 18 March 2040**

Your forecast is £185.15 a week,  
£805.07 a month, £9,660.86 a year

# 7. The UK State pensions: Government Actuary's Quinquennial Review of the NI Fund as at April 2020

Chart 2.2 – Projected Fund income and expenditure 2020-2021 to 2085-2086 (in real earnings terms)

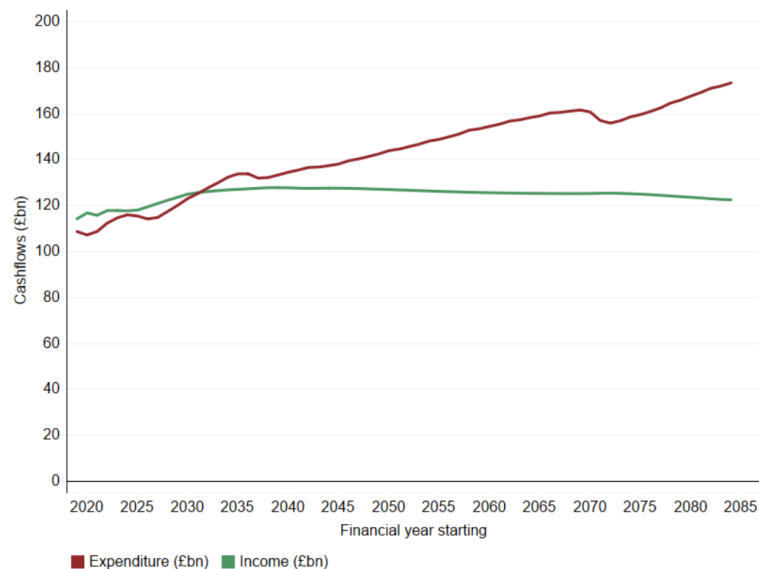


Chart 2.3 – Projected population of Great Britain and dependency ratio

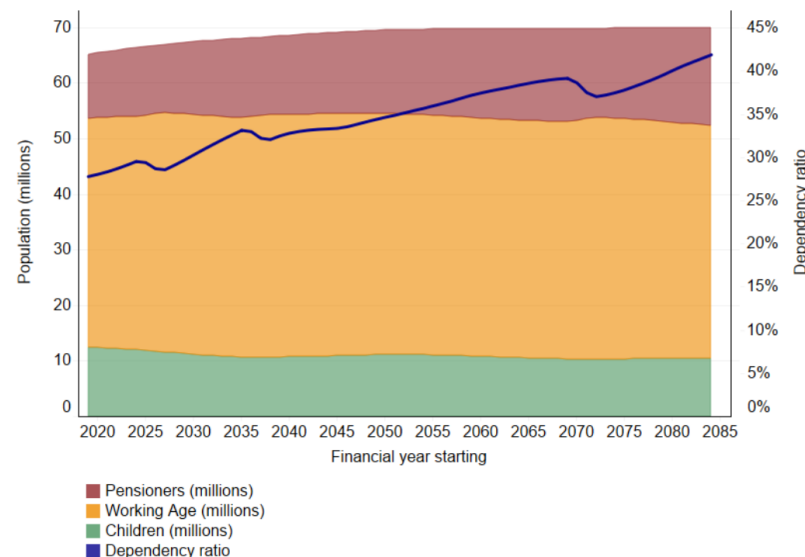
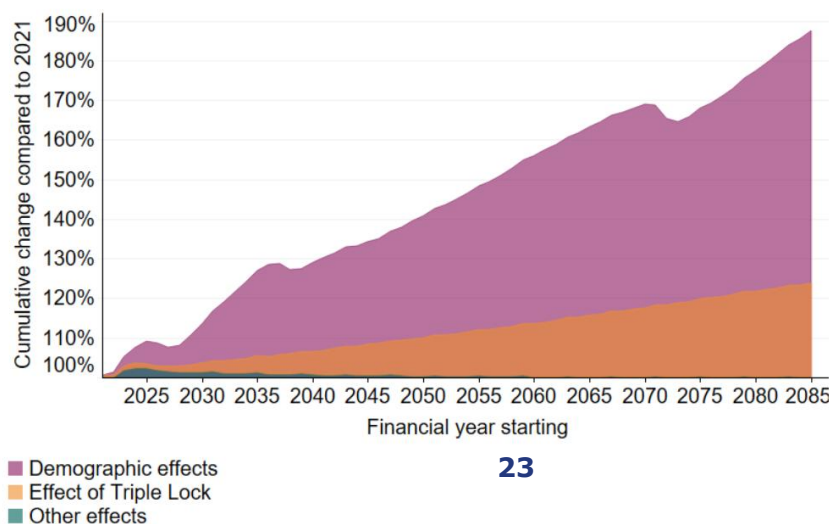


Chart 2.4: Factors driving increases in total benefit expenditure (in real earnings terms)



# 7. The UK State pensions: Government Actuary's Quinquennial Review of the NI Fund as at April 2020

Chart 3.2 – Projected breakeven contribution rates 2020-2021 to 2085-2086 – principal assumptions & 2018-based population assumptions

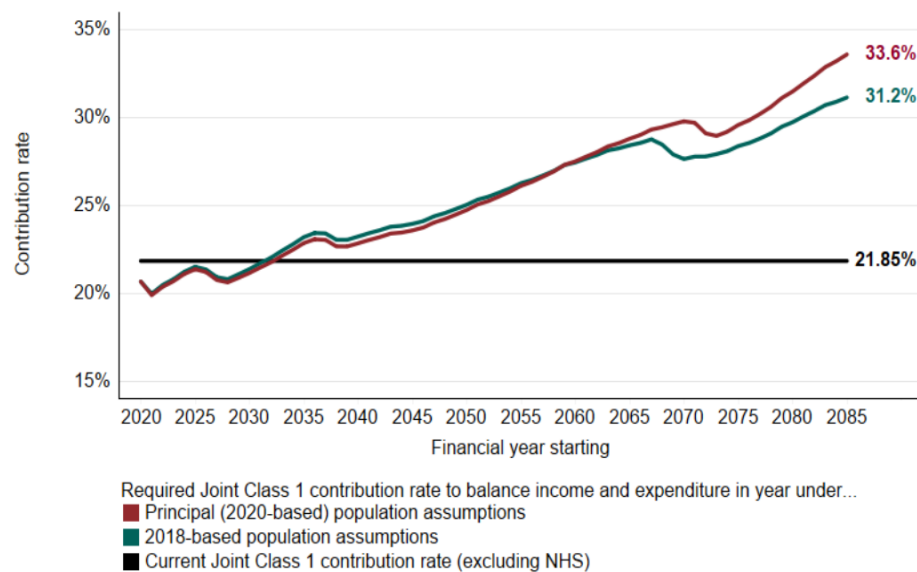
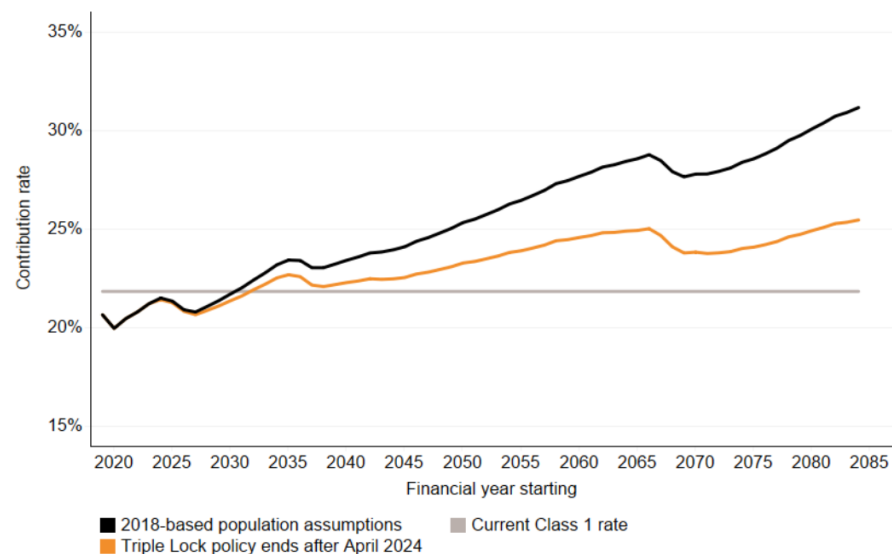


Chart 3.5 – Variant Triple Lock scenario – Projected breakeven contribution rate



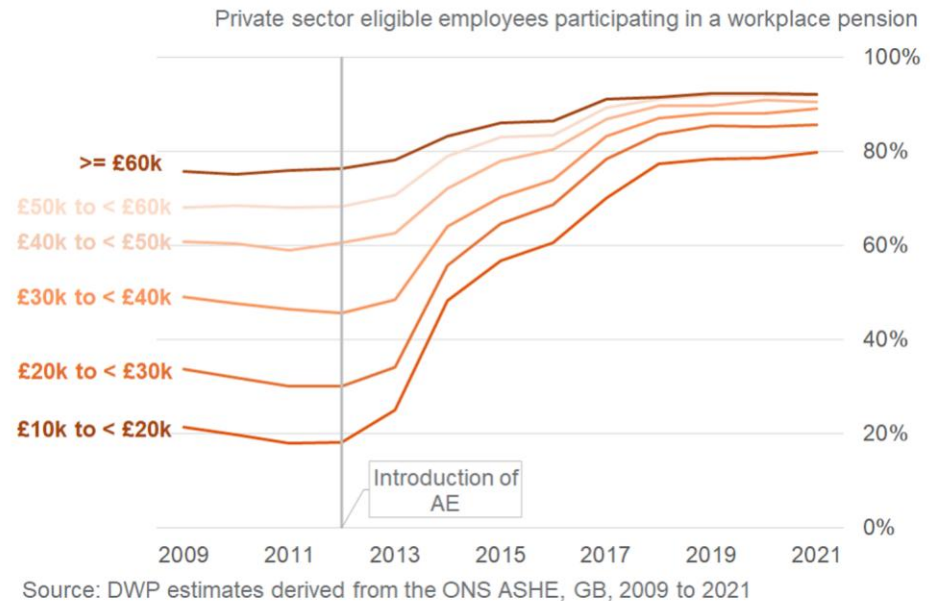
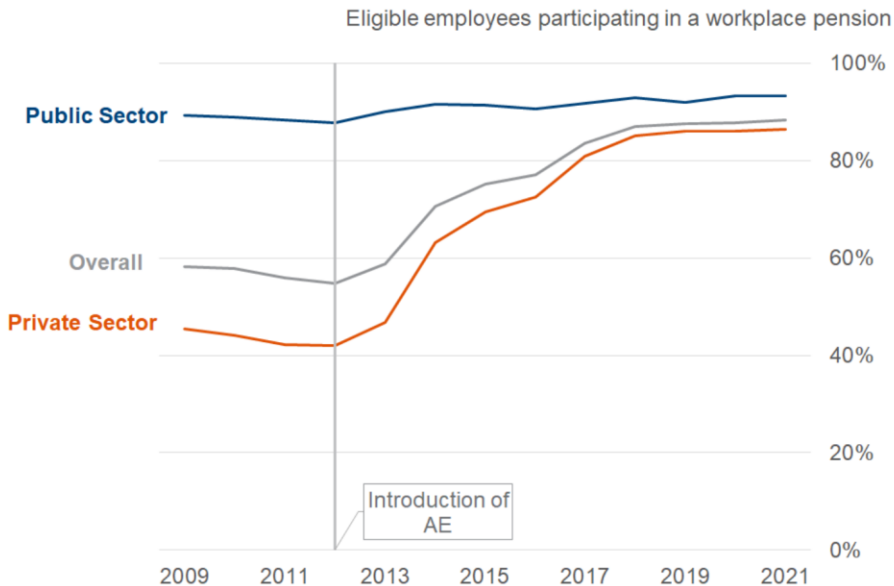


## 7. The UK pension system: Occupational (work-based) pension plans

- All employers **must** provide a **workplace pension** scheme.
- Your employer must **automatically enrol** you into a pension scheme and make contributions to your pension.
- This is called '**automatic enrolment**'.
- There is a **minimum** total **amount** that has to **be contributed** by you, your employer, and the government (in the form of tax relief). Min 5% from you (includes tax relief) and 3% from your employer
- You can **opt out** of your employer's workplace pension scheme after you've been enrolled – but you will lose out your employer's contributions.

## 7. The UK pension system: Occupational (work-based) pension plans

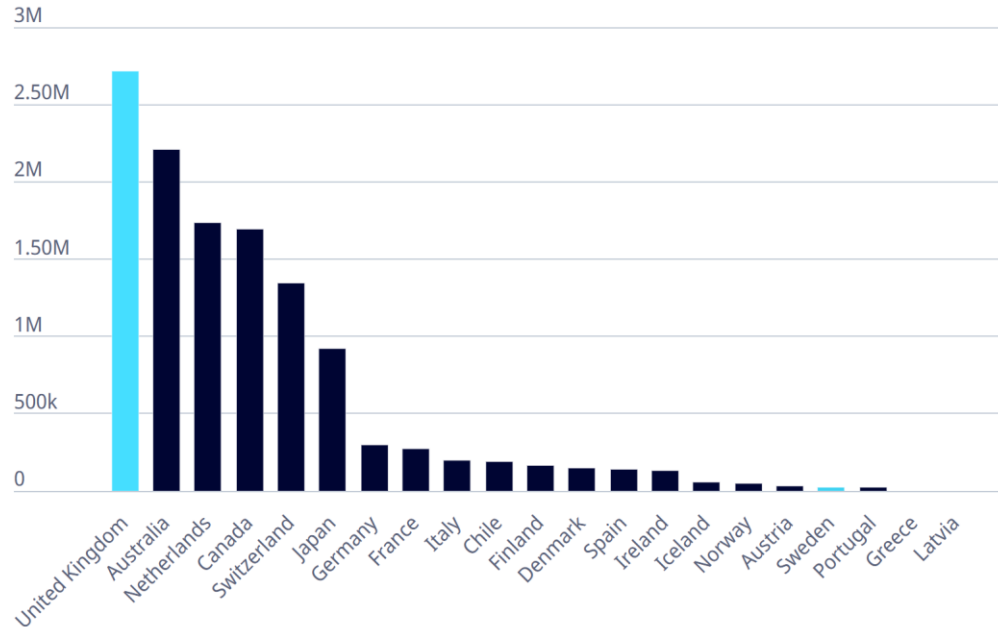
The proportion of private sector eligible employees participating in a workplace pension has increased sharply since 2012; public sector participation remains high



## 7. The UK pension system: Occupational (work-based) pension plans

**Pension funds' assets**

Millions USD, 2023



### Country

### Pension system type

Sweden (~109 %)

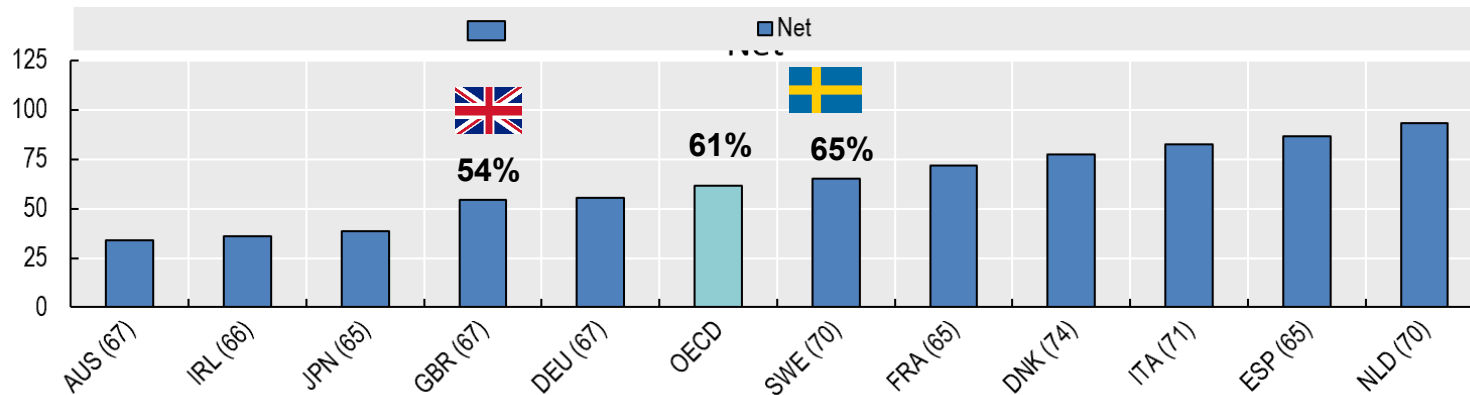
Mixed: PAYG + funded (AP funds + occupational pensions)

UK (~124 %)

Heavily funded private & occupational pensions

## 7. How do the UK compare with other countries?

### 4.4. Net pension replacement rates: Average earners



Source: OECD (2023)

- Average-wage workers contributing for their entire career have a pension equivalent to 54% of previous pay.
- For low earners, the net replacement rate is 72%, assuming they contribute fully
- **Relying on the state pension will only generate an average of 28%. In Sweden, the part of NDC represents 43%.**

## 8. What can the UK learn from the Swedish pension system?

- **Transparency**: Sweden's public pension system uses the **Actuarial Balance Sheet (ABS)** and the **balance ratio** to monitor the financial health of the NDC pension annually.

This approach provides clear, quantitative indicators of the system financial sustainability.

- **Risk Management**: The **ABM** protect the system from financial, demographic shocks without requiring any other reforms.
- **Communication**: The Swedish system provides **simple information to individuals**, including personalized pension statements covering pensions, and projected replacement rates.

Still understanding remains limited

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