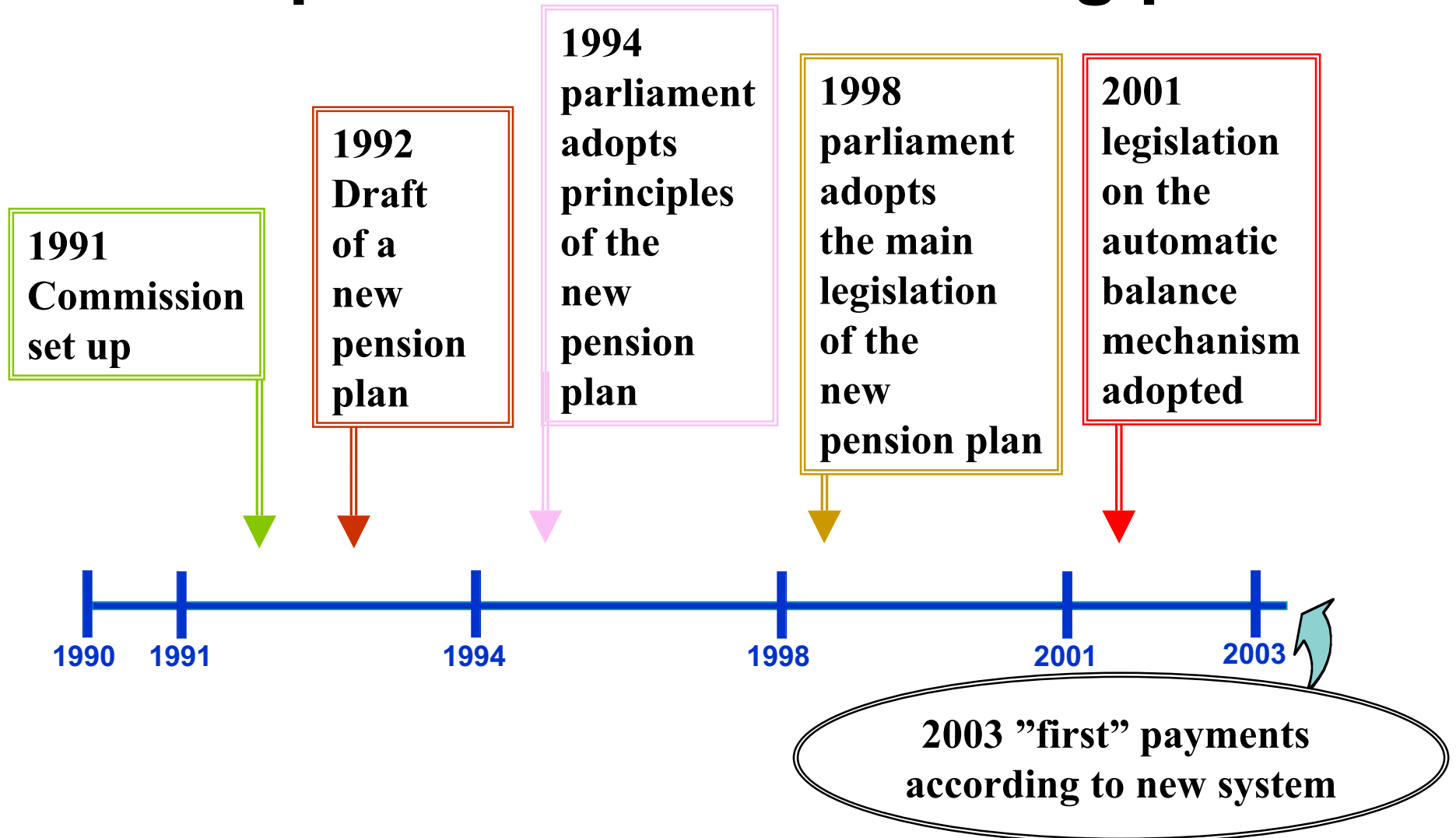
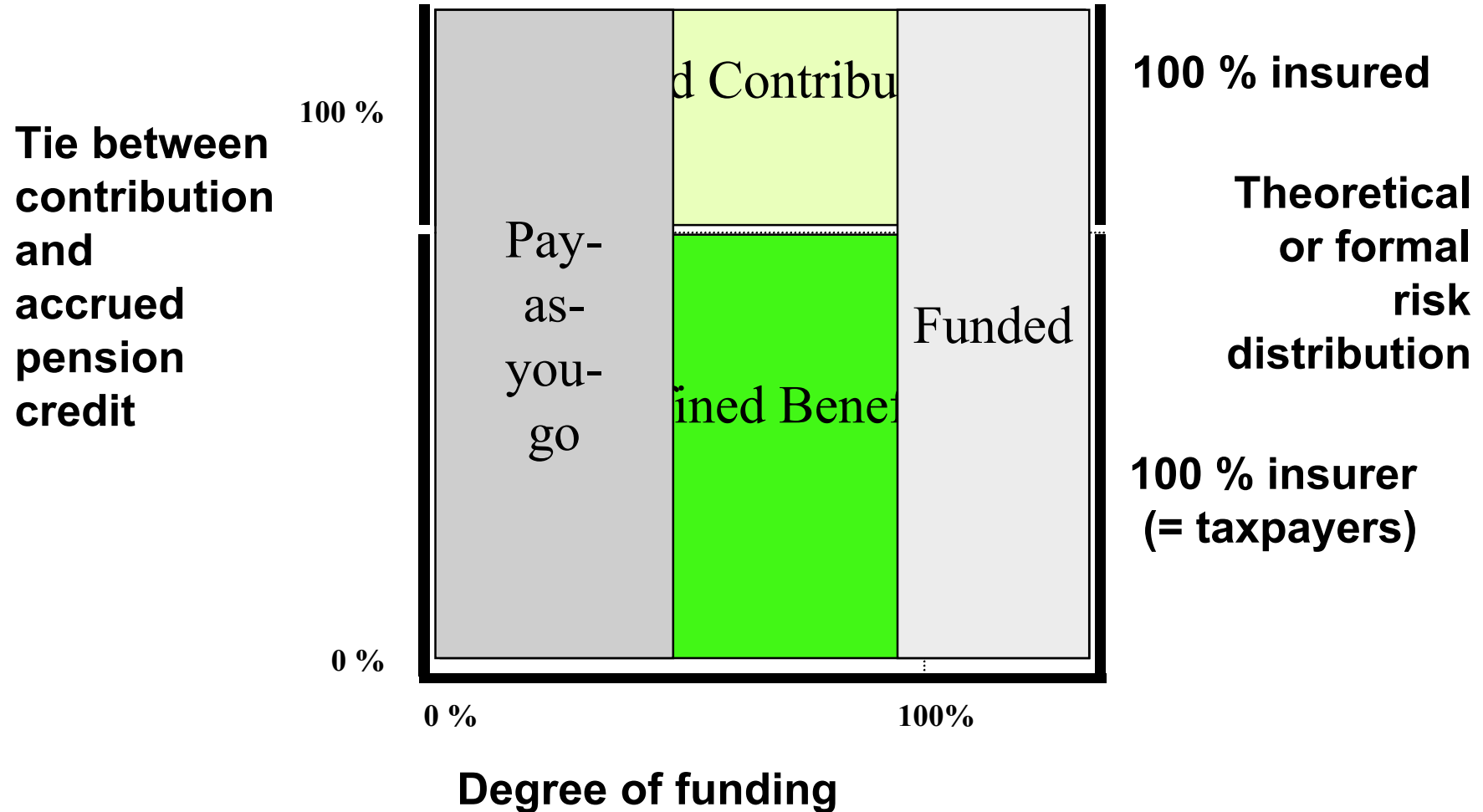


Financial Indicators of an Automatically Financially Balanced Public Pension Plan

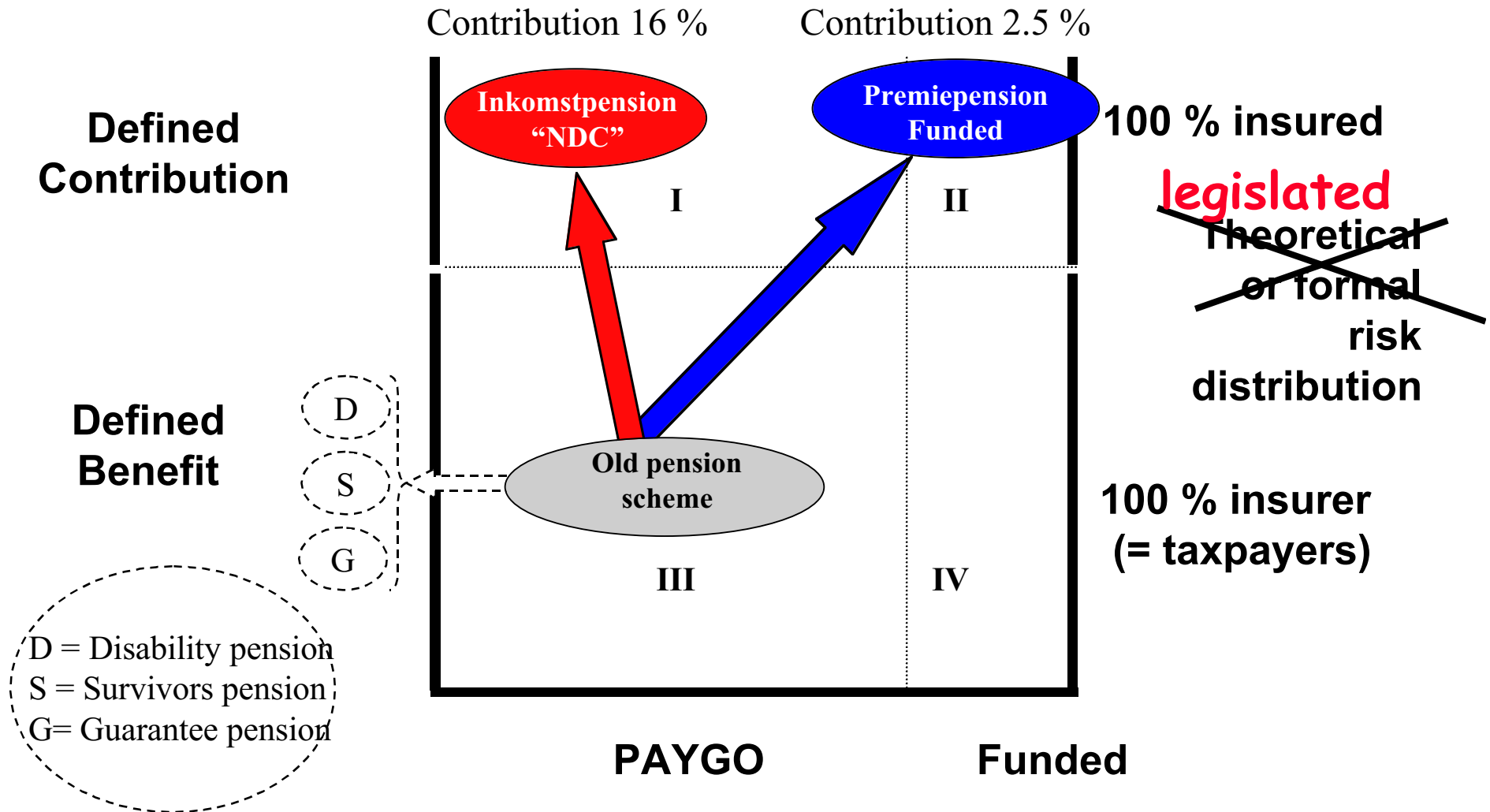
Swedish pension reform - a long process



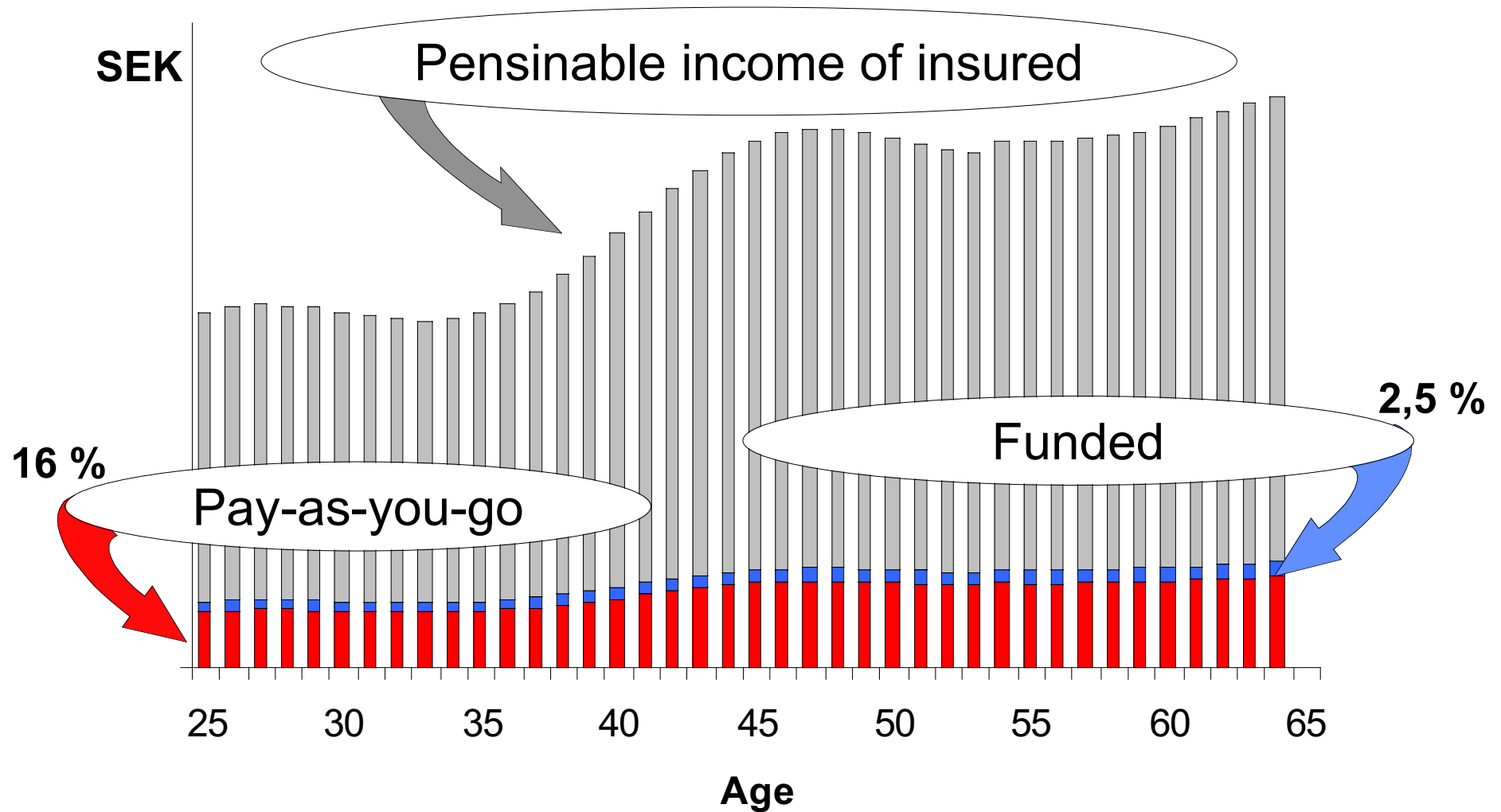
Four basic design options



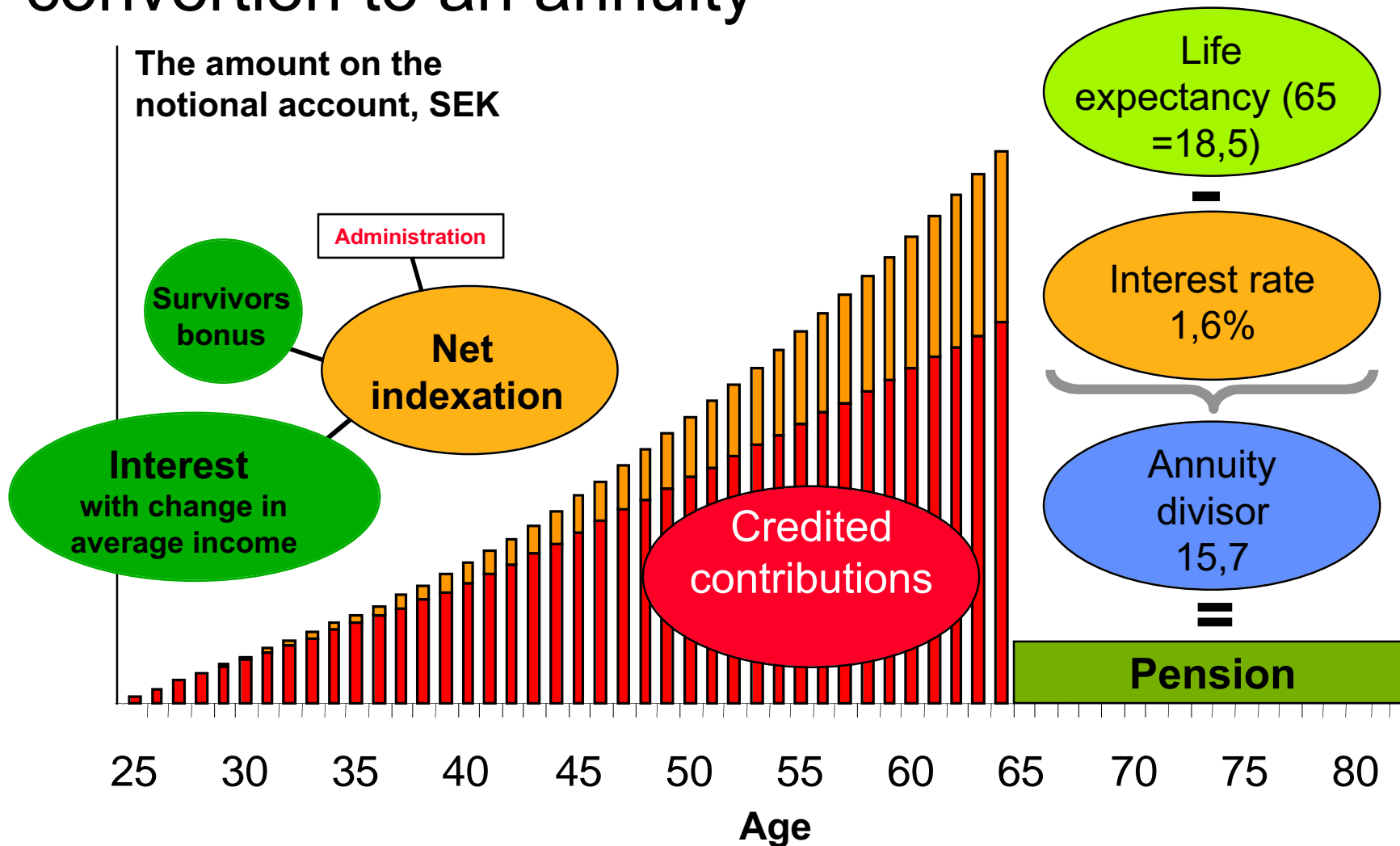
La stratégie de la réforme suédoise



Each crown payed during life result in the same amount of pension credit



Development of notional account and conversion to an annuity



**Traditional social security indicators of financial balance
(single entry)**

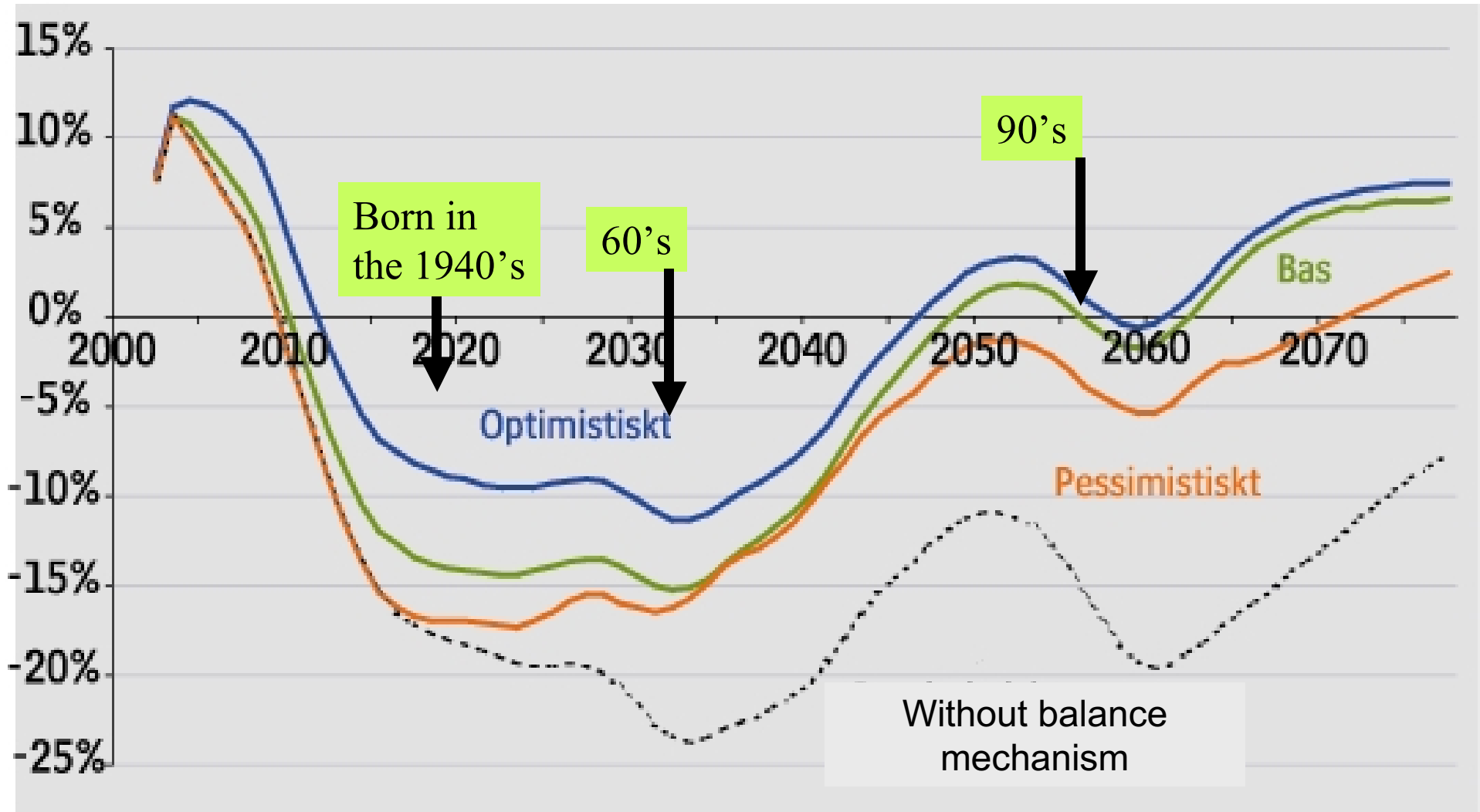
versus

**The double entry bookkeeping indicators of financial
balance developed for the Swedish NDC scheme**

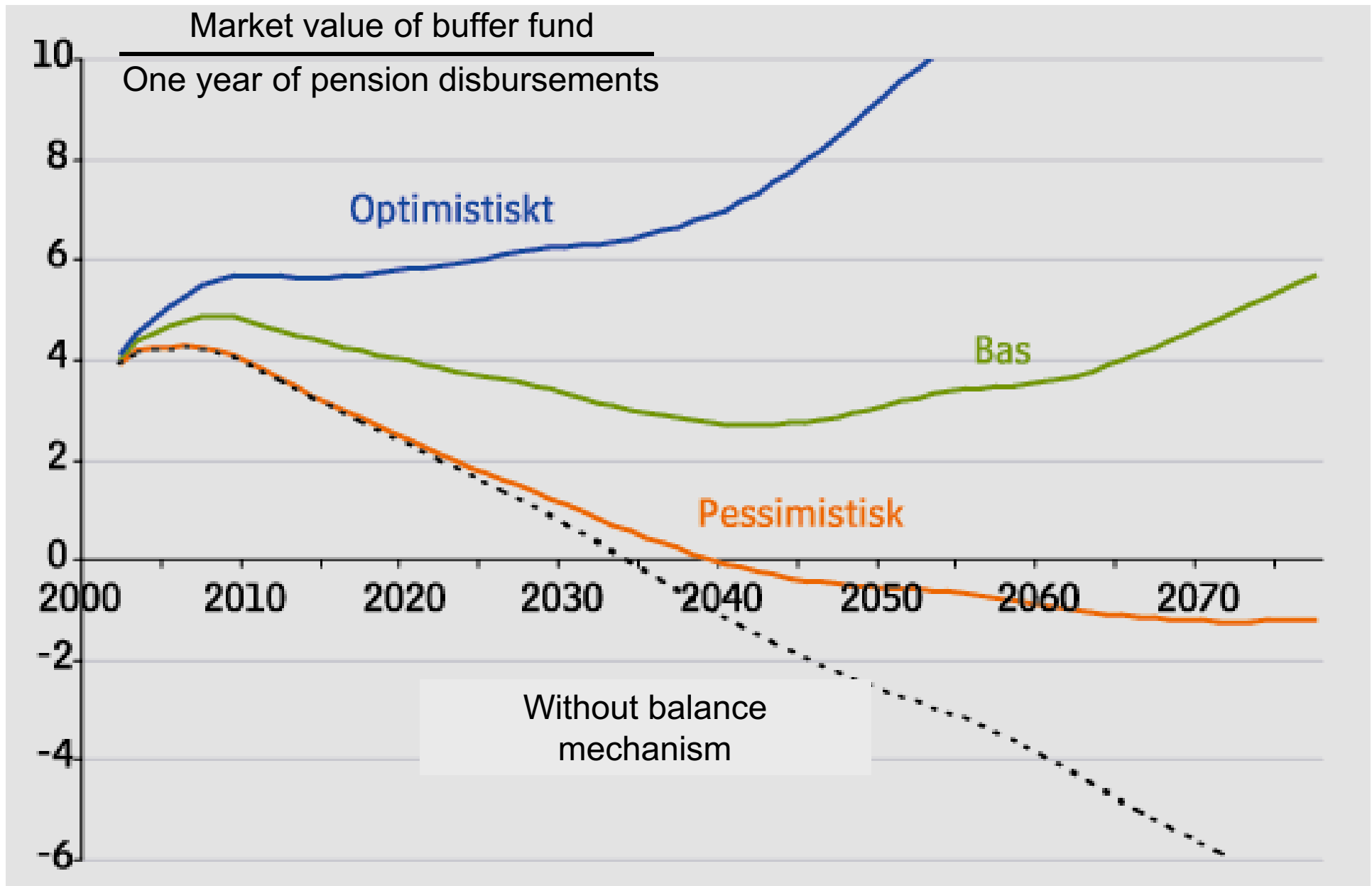
Traditional social security indicators of financial balance (single entry)

Simulations of net contribution 2002-2077

in percent of total contributions

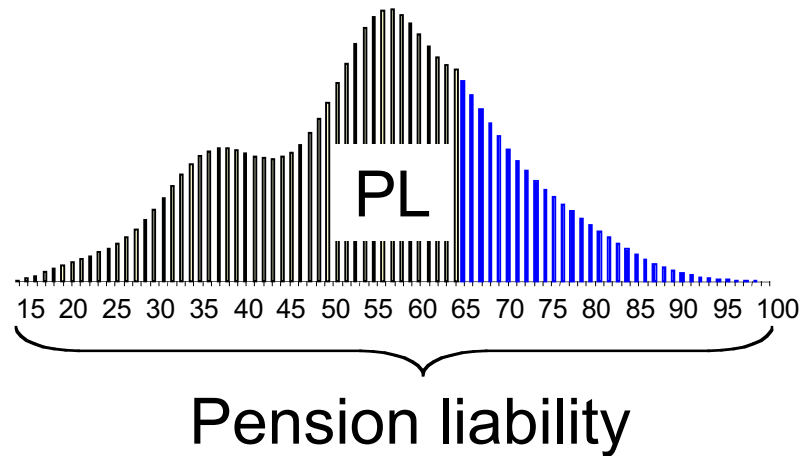
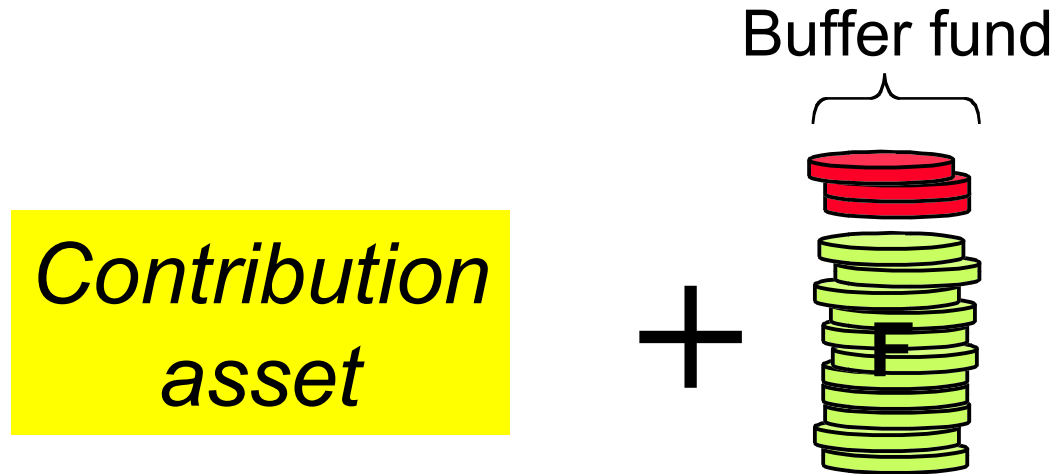


Simulations of fund ratio, 2002-2077



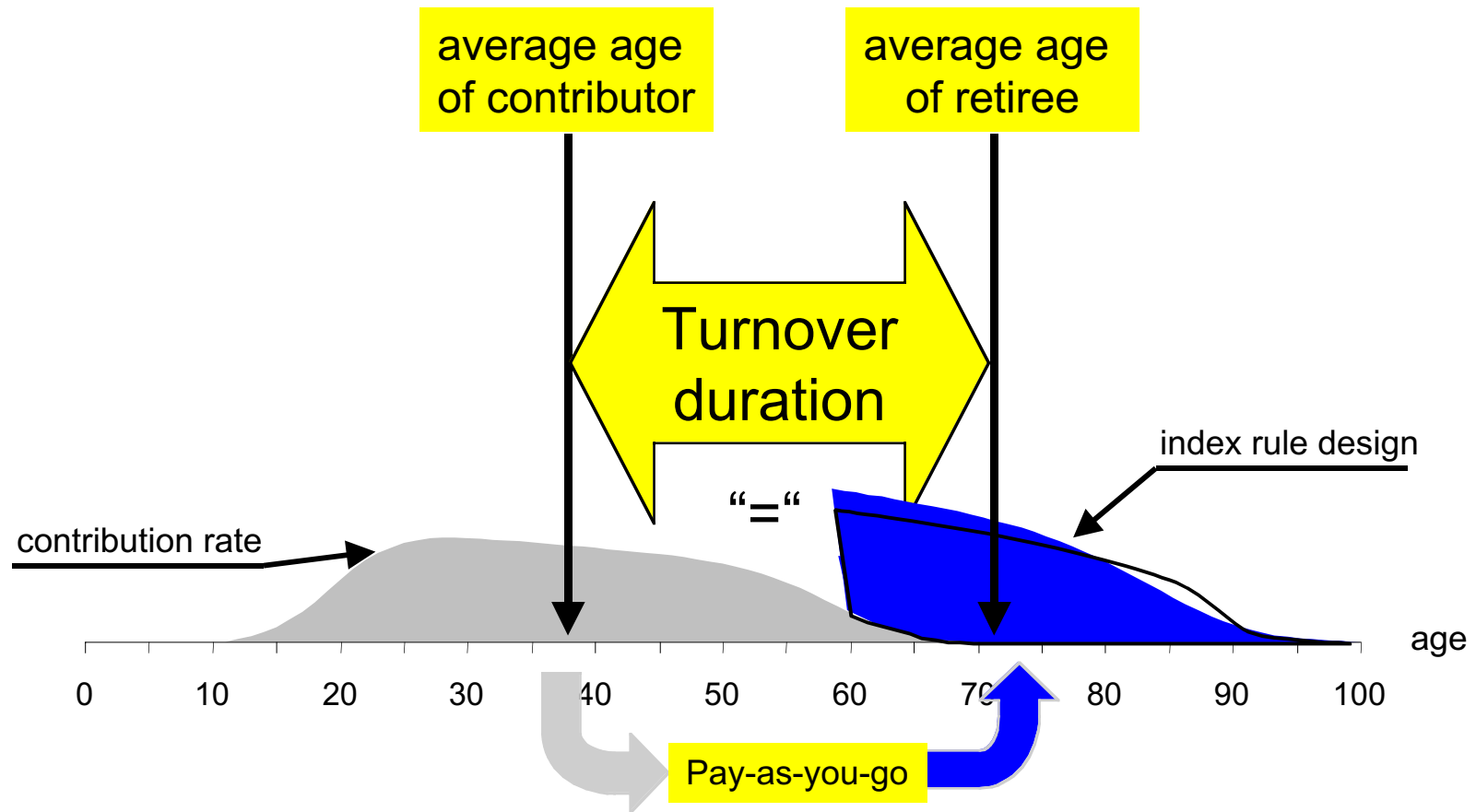
The double entry bookkeeping indicators of financial balance developed for the Swedish NDC scheme

Balance Ratio

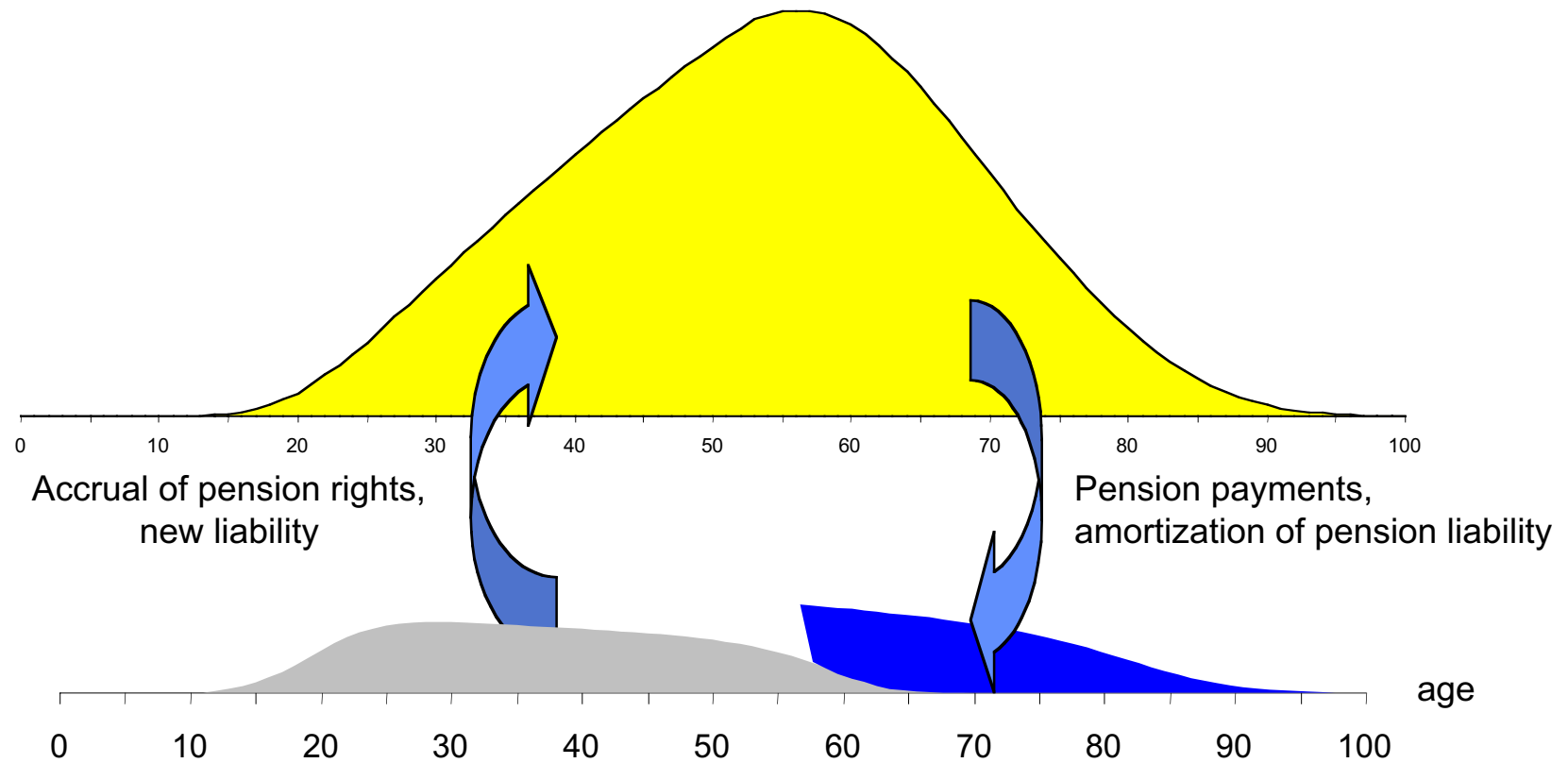


Expected contributions & pensions

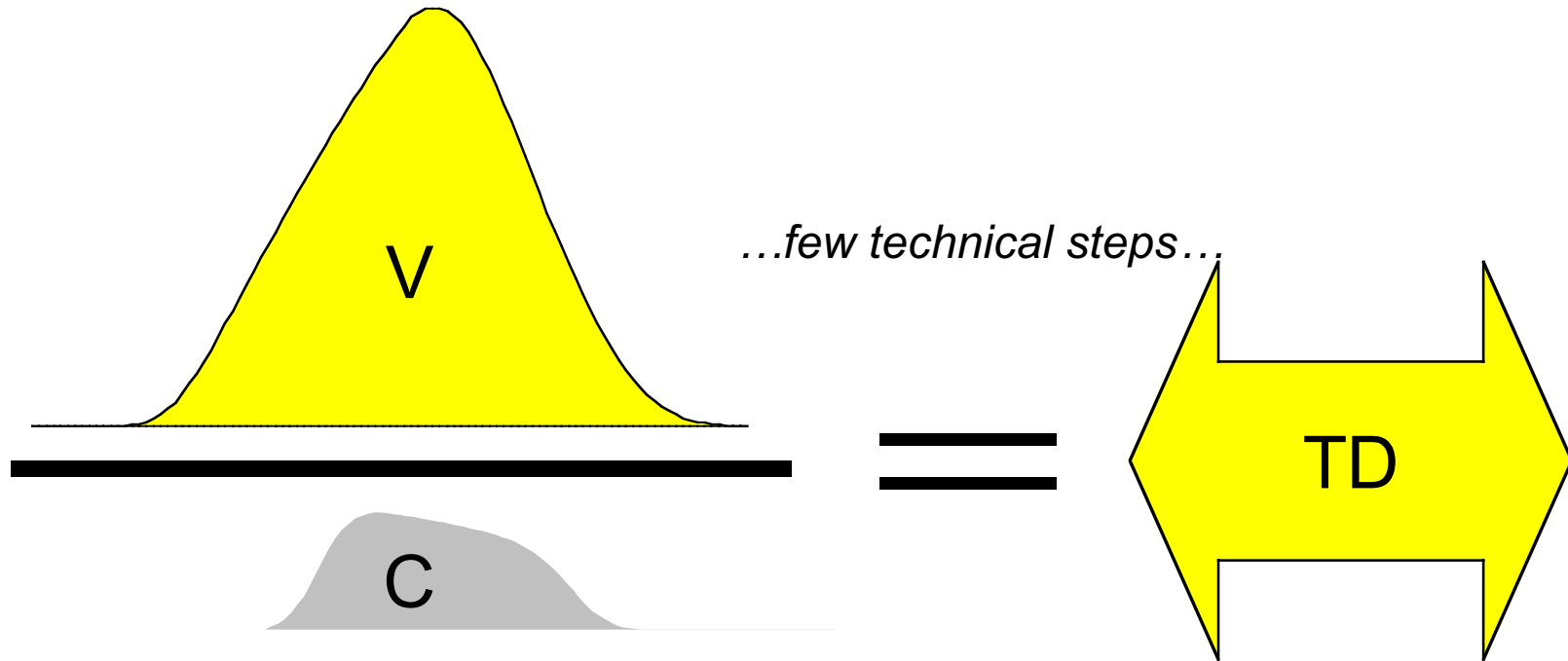
Expected, money weighted



Expected Pension Liability



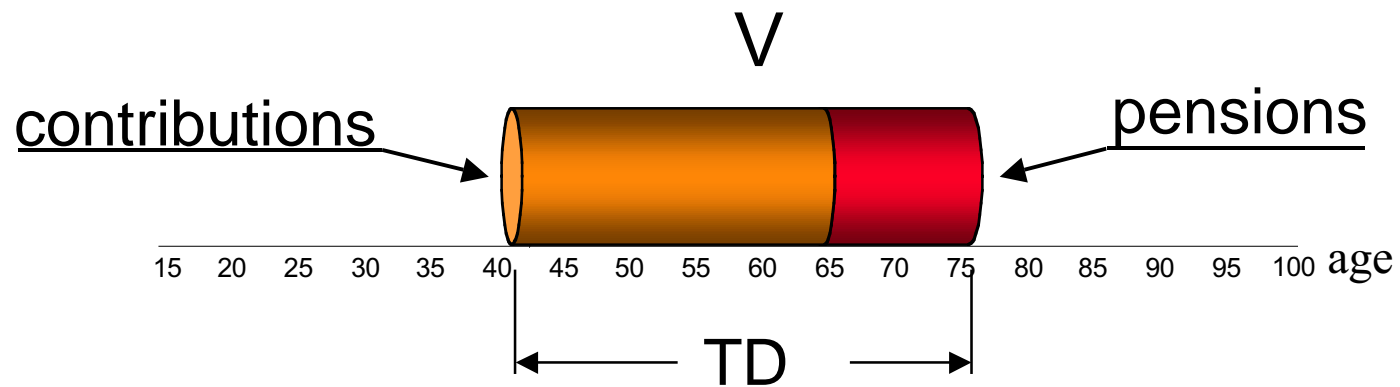
Expected Pension Liability Expected Contributions



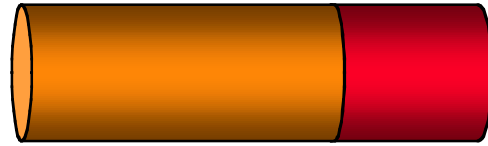
$$\frac{V}{C} = TD \Rightarrow V = TD \times C$$

Volume

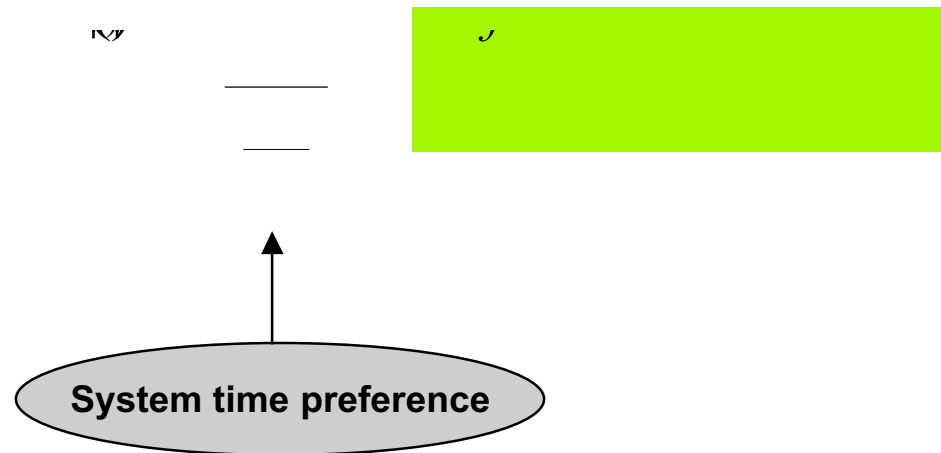
Structure



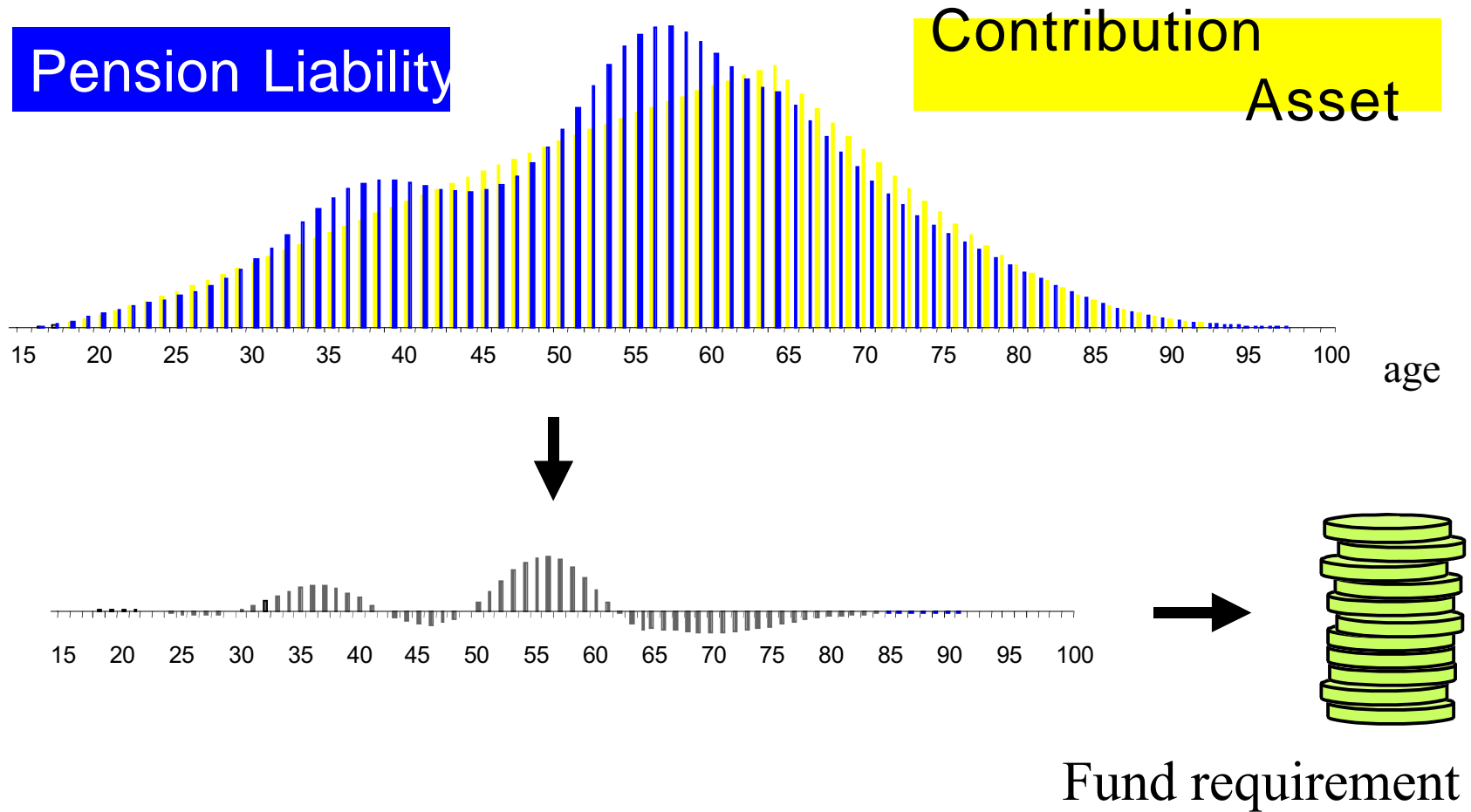
Expected Pension Liability



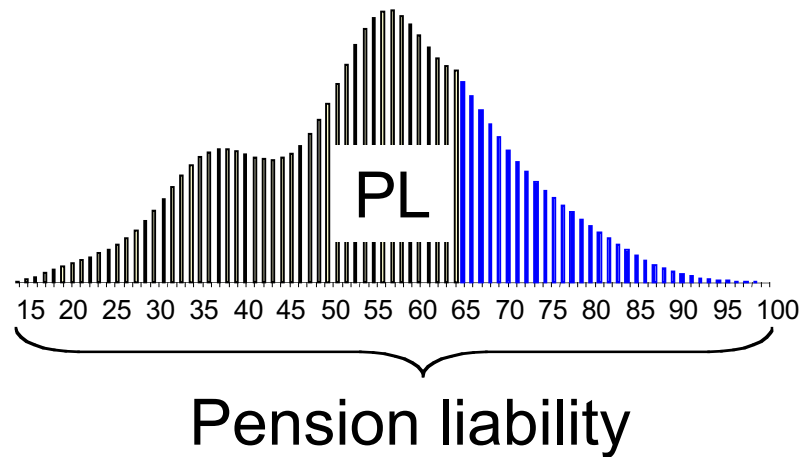
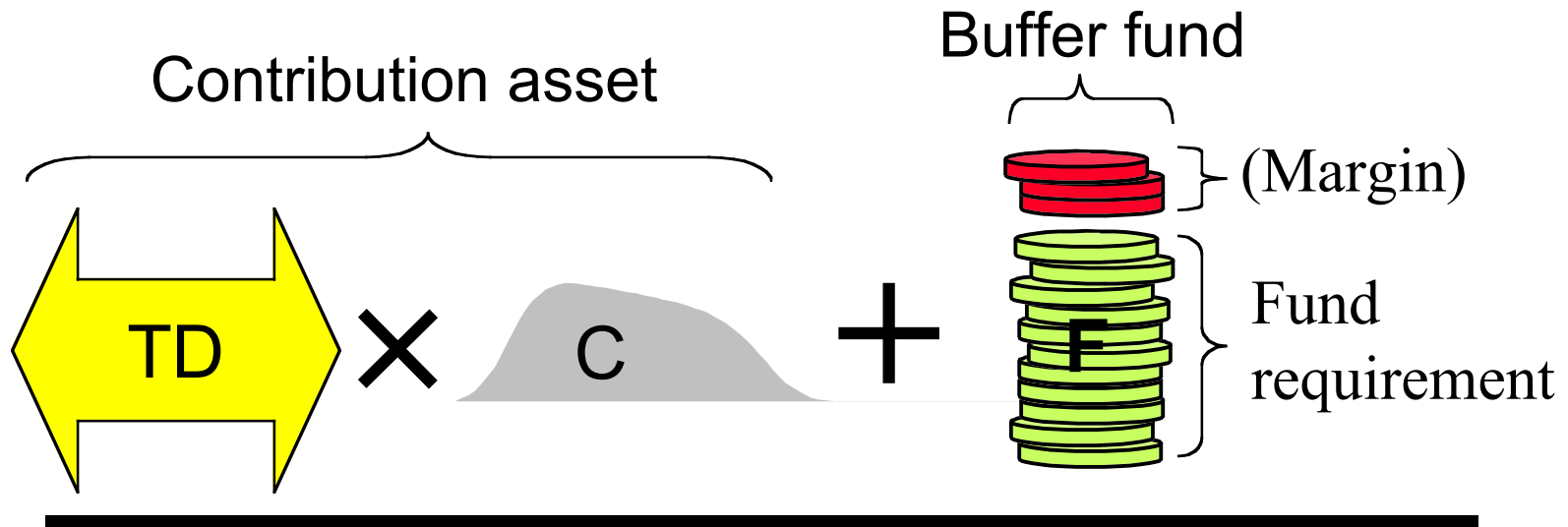
Contribution asset



Pension Liability and the Fund



Balance Ratio



Income Statement, in percent of GDP

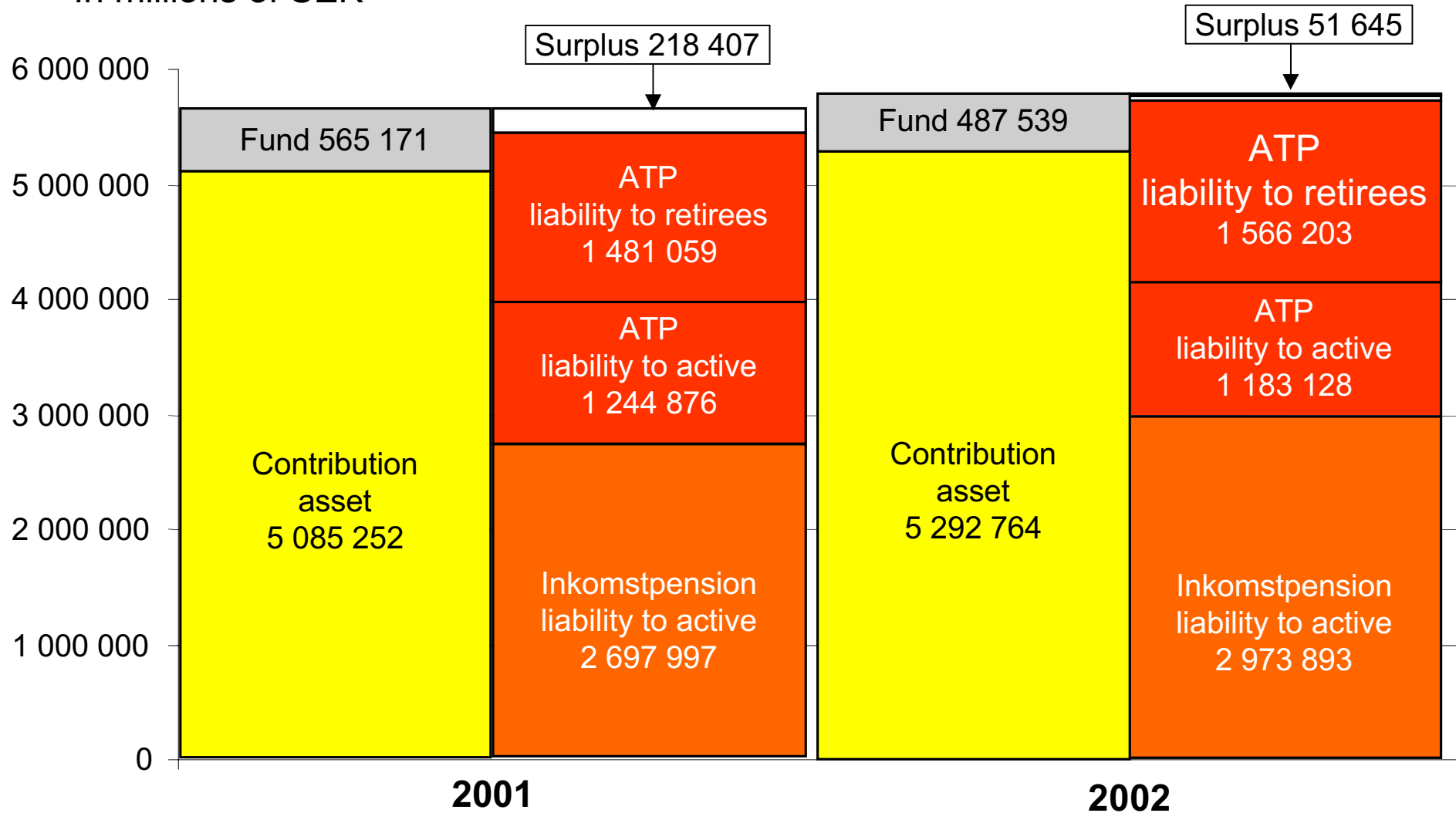
	2003	2002	2001
<i>GDP, millions of SEK (1 Euro ≈ 9 SEK)</i>	2,440,058	2,347,400	2,266,387
Change in funded assets (a)			
Pension contributions	6.8	6.8	6.9
Pension disbursements	-6.4	-6.5	-6.3
Return on funded capital	3.4	-3.6	-1.1
Costs of administration	-0.1	-0.1	-0.1
<i>Total change in funded capital (a)</i>	3.7	-3.3	-0.6
Change in contribution asset (b)			
Value of change in contribution revenue	6.6	9.6	17.9
Value of change in turnover duration	0.5	-0.7	0.7
<i>Total change in contribution asset (b)</i>	7.1	8.8	18.6
Change in pension liability (c)			
New Pension credits and ATP points	-7.1	-7.1	-6.1
Pension disbursements	6.4	6.5	6.3
Indexation	-9.4	-11.8	-5.1
Value of change in life-expectancy	-0.5	-0.3	-0.8
Inheritance gains arising	0.3	0.3	0.2
Inheritance gains distributed	-0.3	-0.3	0.0
Deduction for costs of administration	0.1	0.1	0.0
<i>Total change in pension liability (c)</i>	-10.5	12.6	-5.7
Net income/ -loss (a)+(b)+(c)	0.3	-7.1	12.3

Balance sheet of the *Inkomstpension* as a percent of GDP

	Dec. 31 2003	Dec. 31 2002	Dec. 31 2001
Assets			
National Pension Funds	23.6	20.8	24.9
Contribution asset	224.0	225.5	224.4
<hr/> <i>Total assets</i>	<hr/> 247.6	<hr/> 246.2	<hr/> 249.3
Liabilities and surplus			
Opening surplus/-deficit	2.1	9.3	-2.7
Net income / -loss for the year	0.3	-7.1	12.3
Total (closing) surplus /-deficit	2.4	2.2	9.6
Pension liability	245.2	244.0	239.7
<hr/> <i>Total liabilities and surplus</i>	<hr/> 247.6	<hr/> 246.2	<hr/> 249.3

The balance sheet of the inkomstpension system

In millions of SEK

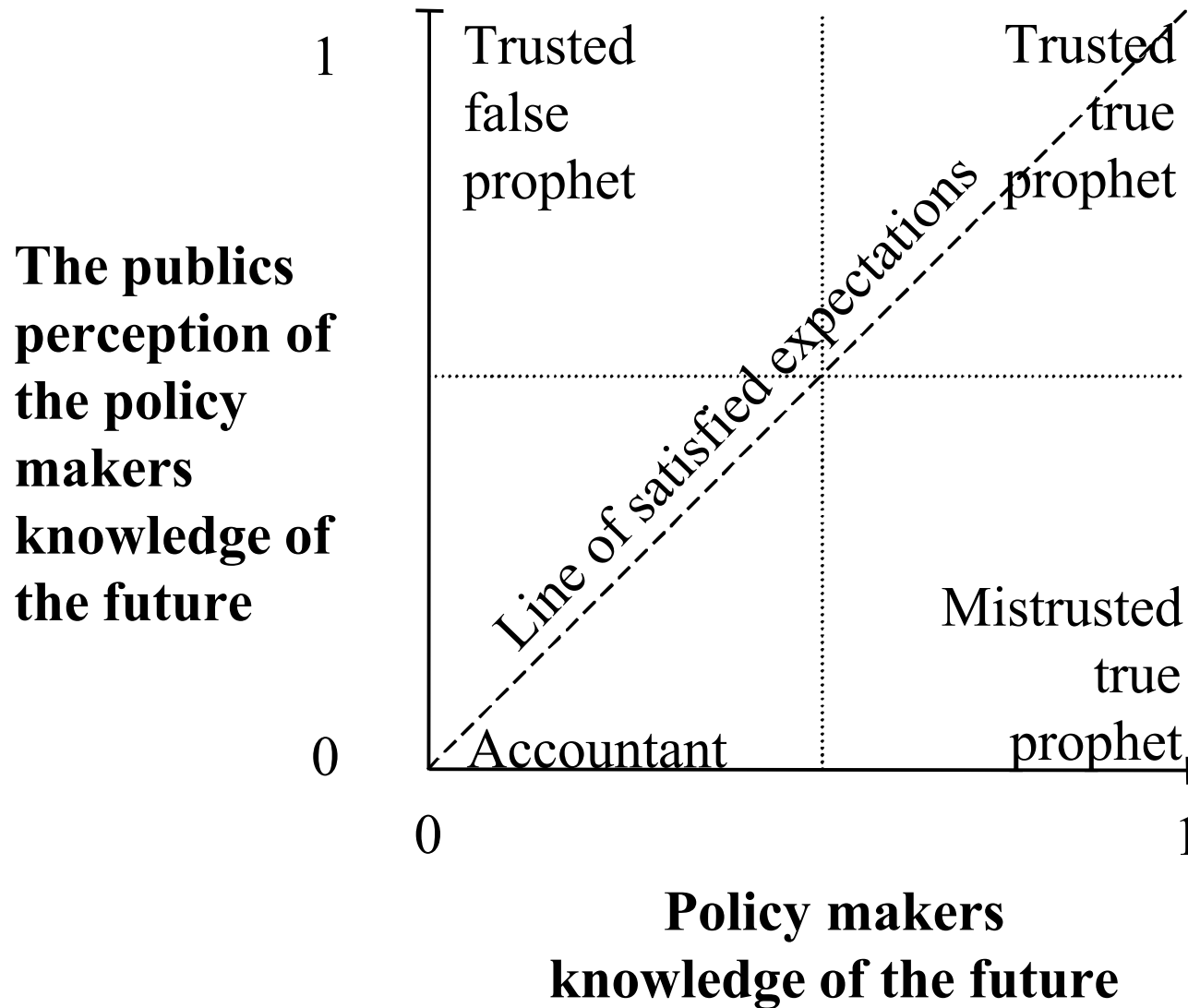


Balance ratio = 1.04

Balance ratio = 1.01

Does measures matter?

Four stylised policy makers – which one are you?



Conclusions:

A difficult, ambitious, possibly very rewarding financial indicator is the most natural of all:

$$\frac{\text{Assets}}{\text{Liabilities}}$$

i.e. the balance ratio. This figure should, preferably be disclosed by double entry bookkeeping, a complete income statement and balance sheet.

A minimum ambition ought to be to make governments annually report the pension plan cost from increases in life-expectancy

More information:

The annual report of the Swedish pension system 2001 & 2002 can be down loaded from:

www.rfv.se/english/publi/index.htm

The 2003 report will be published 29 April,
english translation available from June.

Distributed by: Riksförsäkringsverket (RFV), Stockholm