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The German pension system: Reforms and reform backlashes

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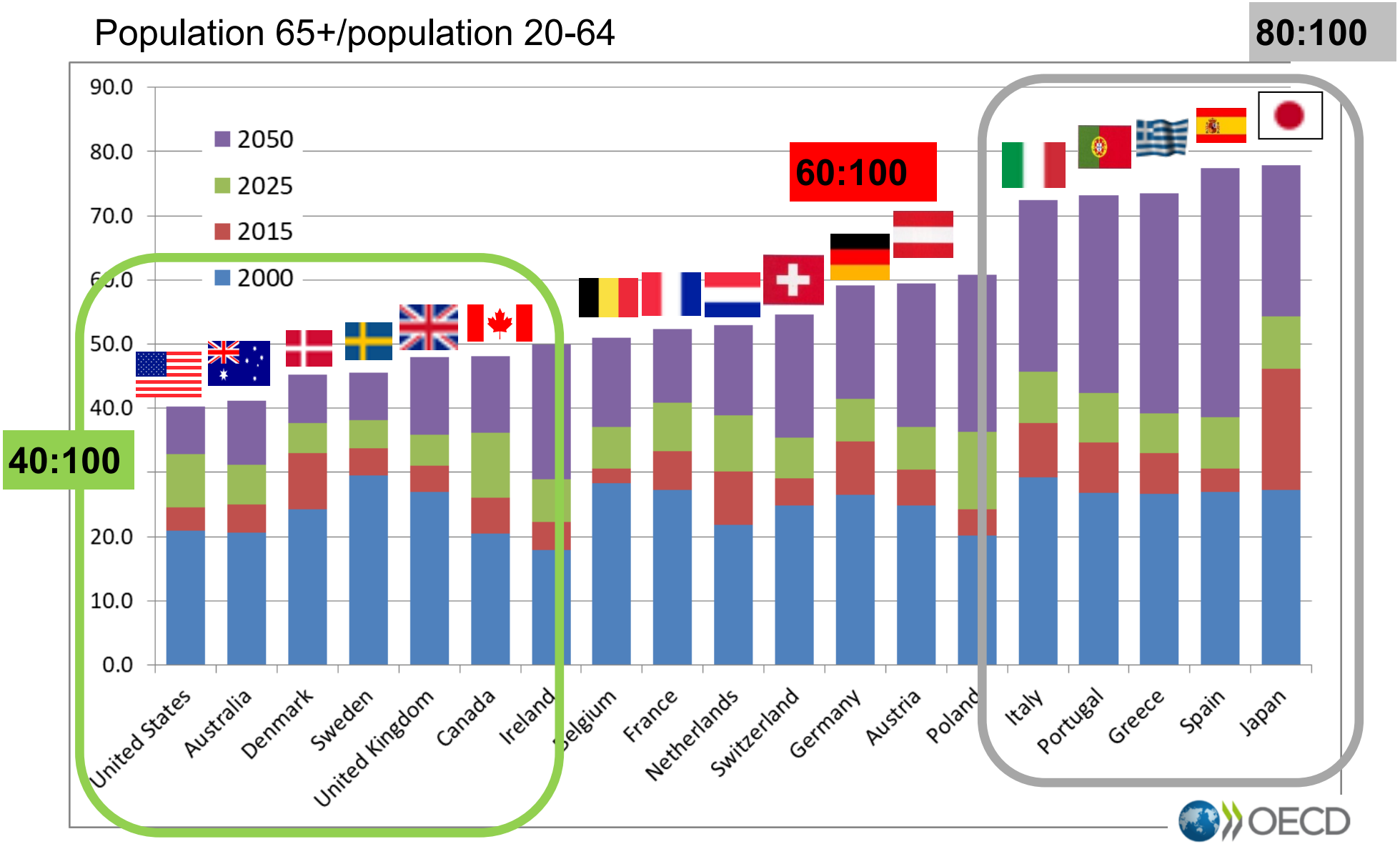
Outline

1. **Where does Germany stand in Europe and the world?** Demographics, labor force participation, adequacy
2. **Basic system set-up:** the pillars and their reforms
3. **First pillar (PAYG) reforms:** the role of automatic stabilizers and the current great backlash
4. **Reforms in occupational and private pension pillars:** the role of information, transparency and default/automatic enrolment

Old-Age Dependency

Population 65+/population 20-64



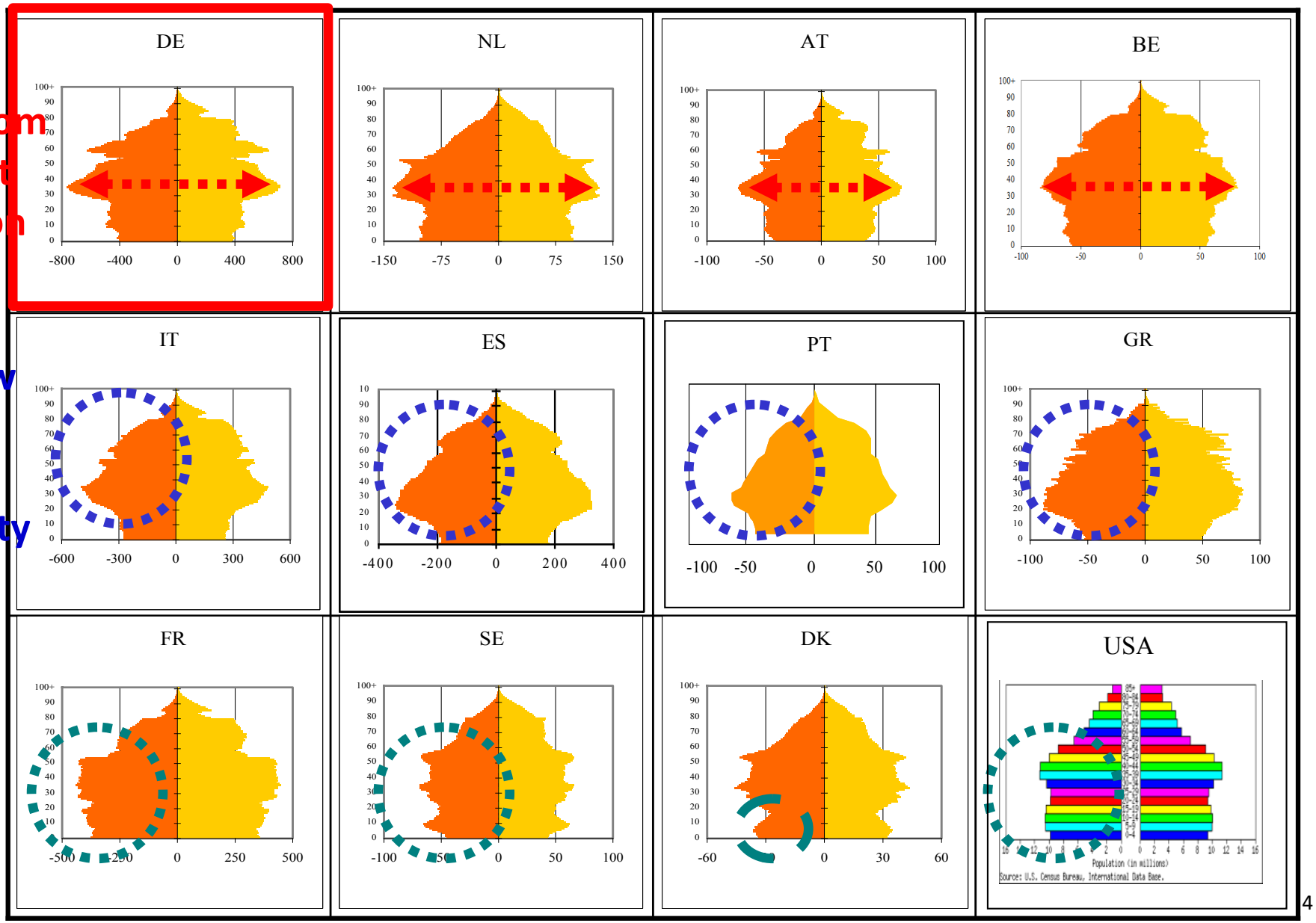
OECD

Demography

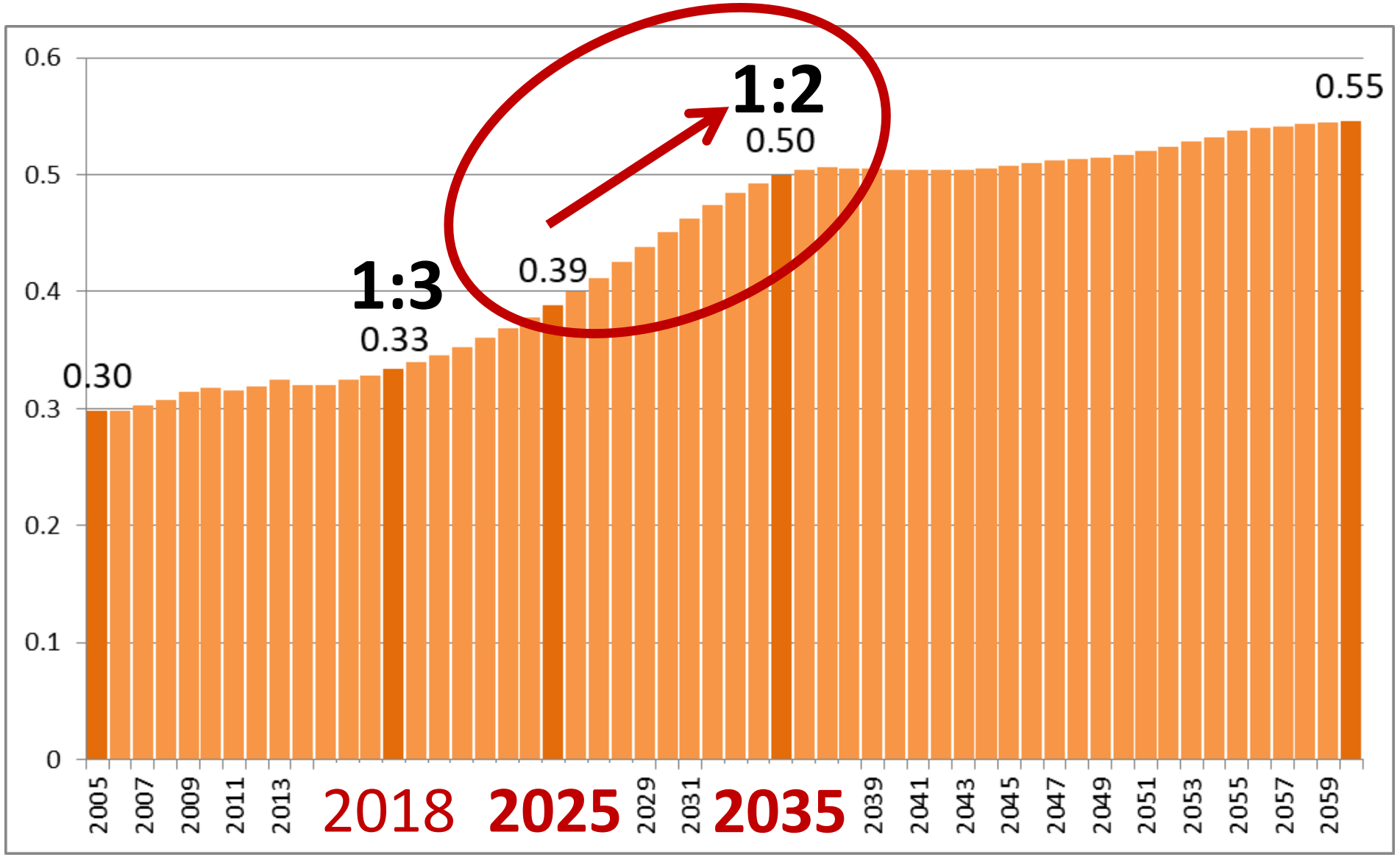
BabyBoom BustBust transition

Past low fertility and longevity

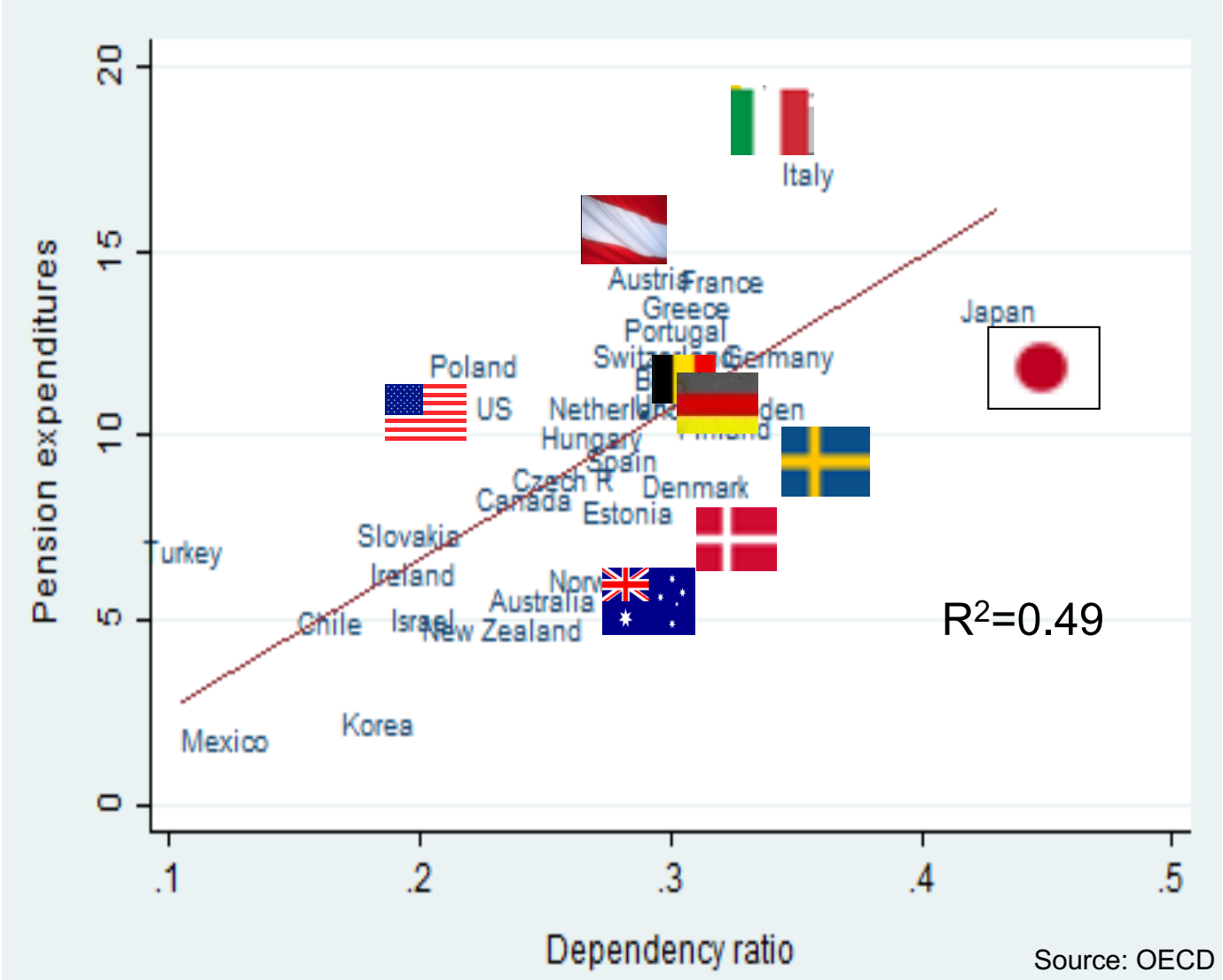
High current fertility



Pensioner per Worker



Demography is not all:



Source: OECD

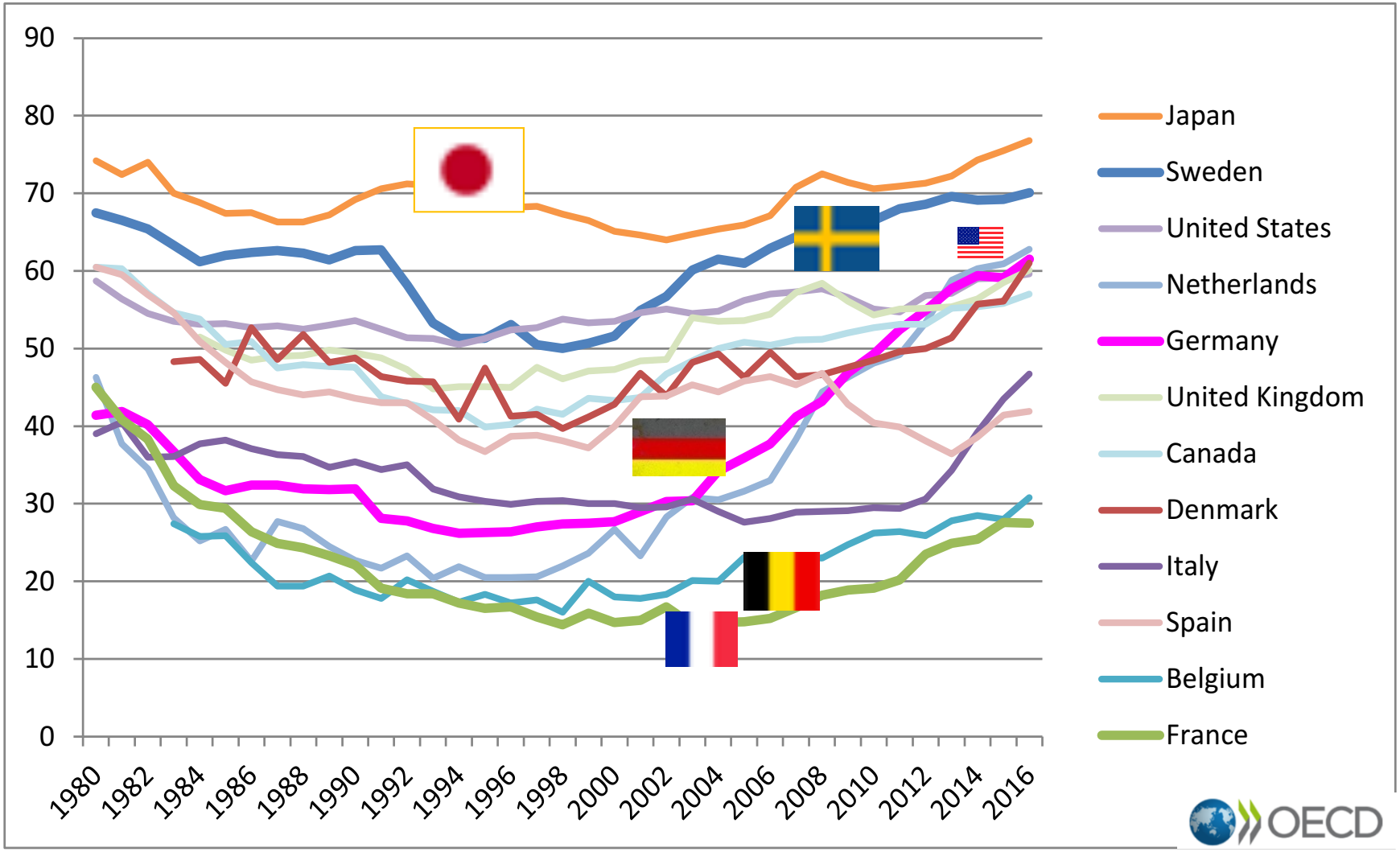
More generous, less efficient
Early retirement

More efficient, less generous
Lack of adequacy old-age poverty

Financial sustainability vs social adequacy

Early retirement

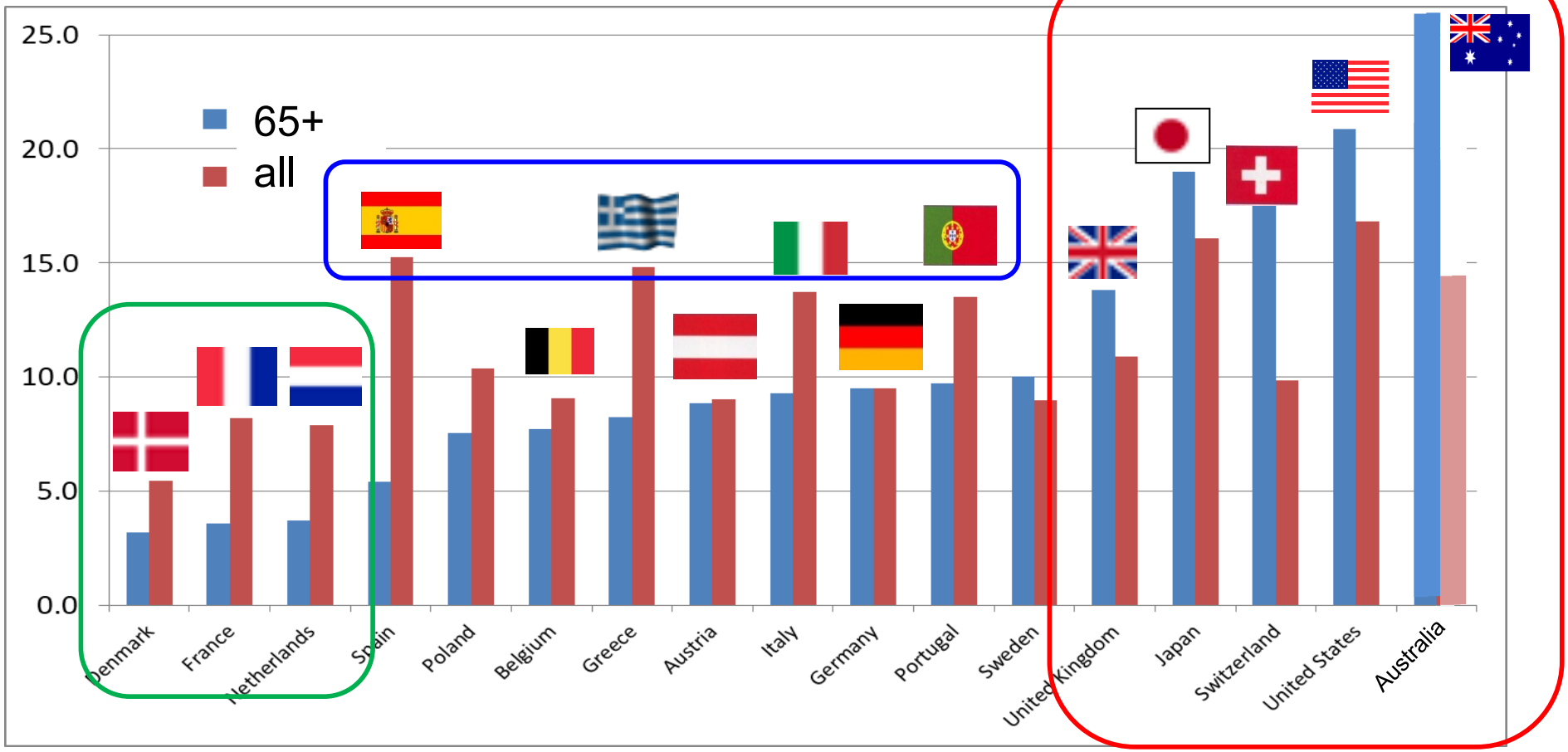
Old age labor force participation (Men 55-64)



OECD

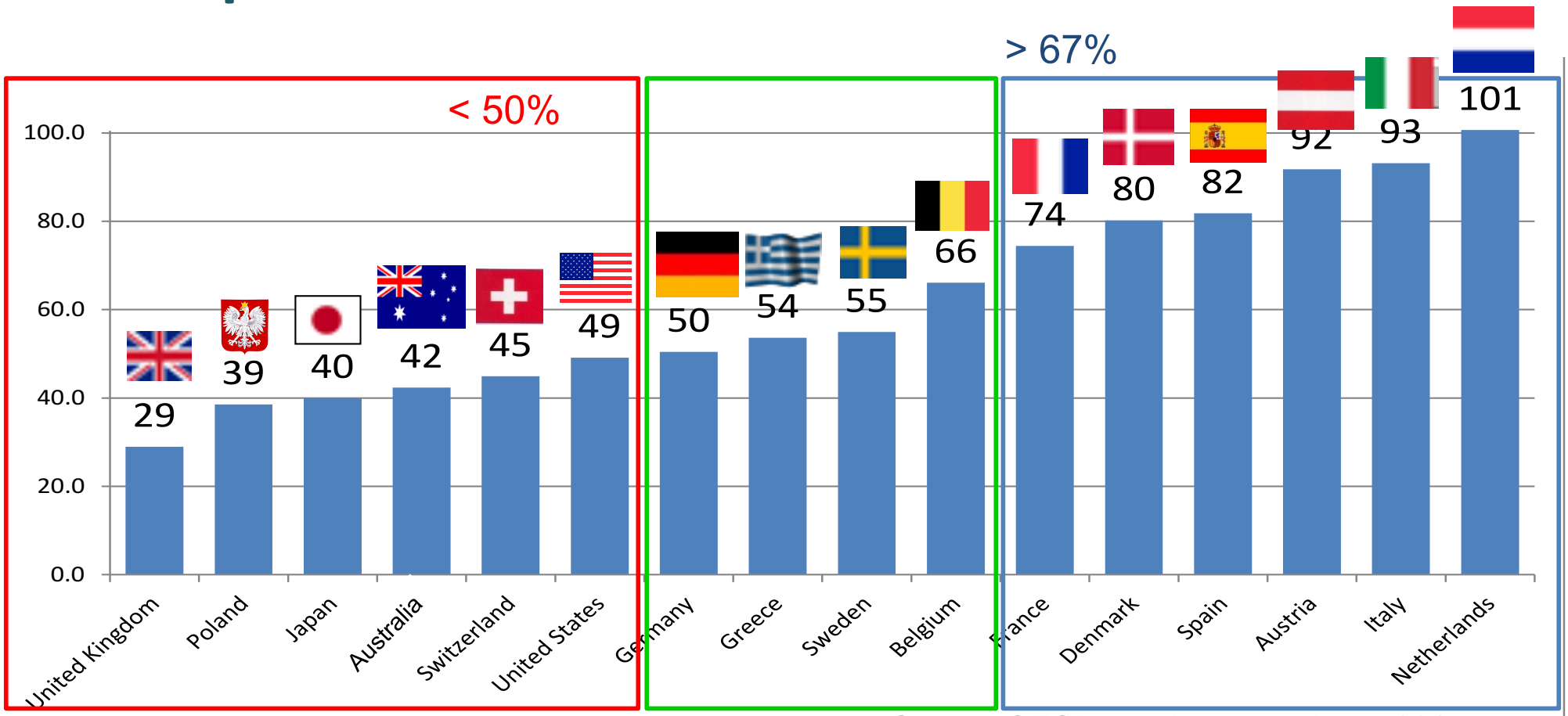
Adequacy

Old-age poverty (OECD definition)



Source: OECD PAG 2017: Percentage with incomes less than 50% of median household disposable income

Net replacement rate for the median earner



Source: OECD pensions at a glance 2017

Main challenge: reform backlash

Basic set-up

For about 3%:

Pillar 0: Means-tested base pension: € 416 + housing

For the „normal“ worker (about 85%):

Pillar 1: Public PAYG system

-Mandatory except civil servants and self-employed

-DB with adjustment for demography , point system

€ 1.396

Pillar 2: Occupational FF, DB

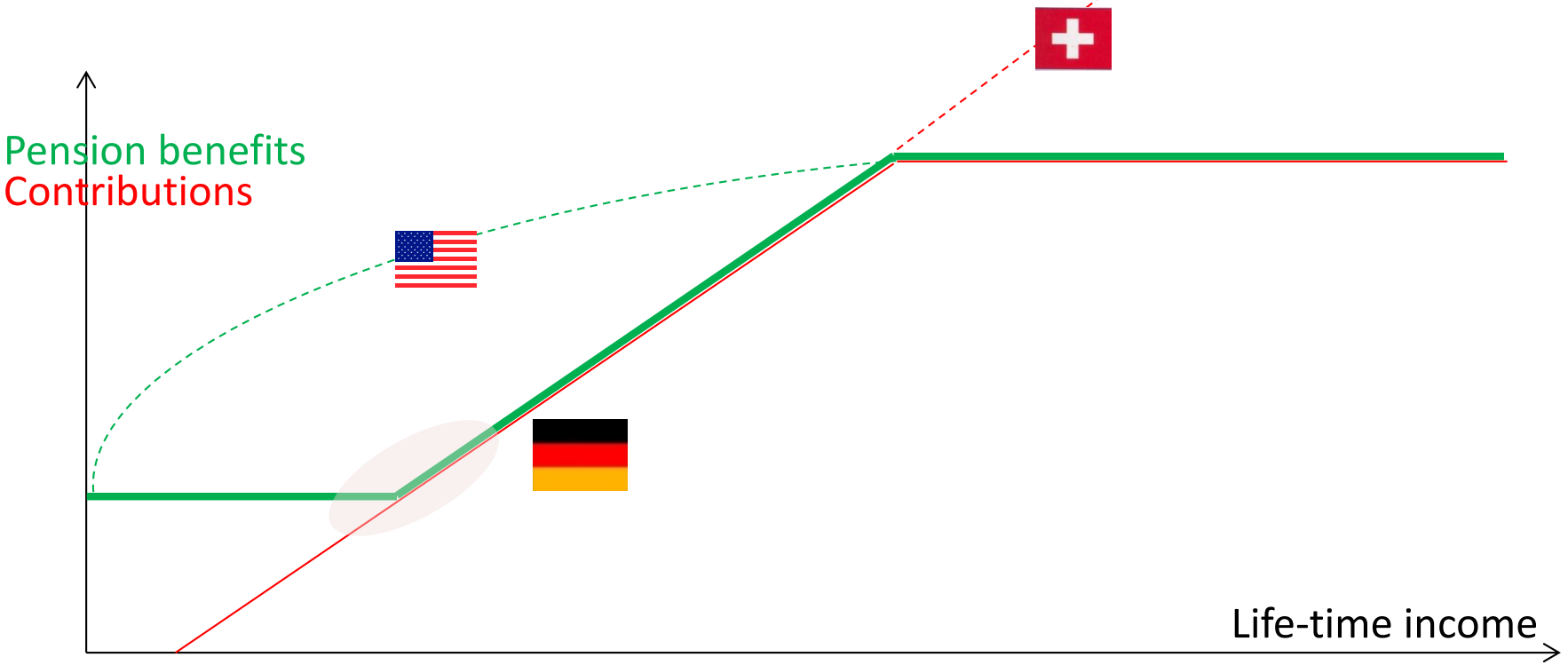
-Voluntary on ER side, then mandatory for EE

Pillar 3: Indiv. accounts FF, DC

-Voluntary, heavily subsidized „Riester pensions“

Switzerland: Redistribution through pensions rather than taxes

USA: Redistribution through progressive pensions



PAYG: Micro level

Pension benefits at time t for an individual i claiming benefits at age R: $p_{t,i,R} = s_i \cdot q_t \cdot \omega_R$

s_i = **earnings points linking the pension benefit to this individual's earnings:**

$$s_i = \sum_{i=0}^{R-1} \frac{w_i h_i}{\overline{w}\,\overline{h}}$$

q_t = **basic pension value** for one earnings point at time t

defines replacement rate $r_t = \overline{s} \cdot q_t / w_t$

ω_R = **adjustment factor linking pension benefit to claiming age *R:***

$$\omega_R = 1 + \left(R - \overline{R}\right)\omega \qquad \omega = \text{ 3.6\%/6\% before/after } \overline{R}$$

Actuarial adjustment factors at earliest age of claiming benefits

	Current legislation
Austria	4.2
Germany	3.6
France	5.0
Italy	2.3-2.9
Spain	6.0-7.5
Greece	6.0
Sweden	4.1-4.7
Finland	4.8
US	6.67

The table shows the adjustment factors for statutory early retirement. Many countries have additional pathways not included here.
Source: OECD (2013) and Queisser and Whitehouse (2006).

Pension reforms "Agenda 2010"

1. Reforms to prevent poverty

Means-tested base pension ***2001***

2. Reforms for the „normal" worker

a. Pay-as-you-go pillar

Retirement age ***2007***

Replacement rate

Life expectancy

System dependency ***2004***

NDC

b. Fully-funded pillars

Mandatory (occupational, state)

Voluntary (individual) ***2001***

„Nudging"

PAYG: Macro level

1. Determination of either the replacement rate in a DB system or the contribution rate in a DC system:

- **DB system: Fixed replacement rate r_0** such that $p_t = r_0 \cdot w_t = q_0 \cdot \bar{s}$

$$\tau_t = r_0 \cdot NP_t / NW_t .$$

- **DC system: Fixed contribution rate τ_0** for a cohort of workers.

$$r_t = \tau_0 \cdot NW_t / NP_t$$

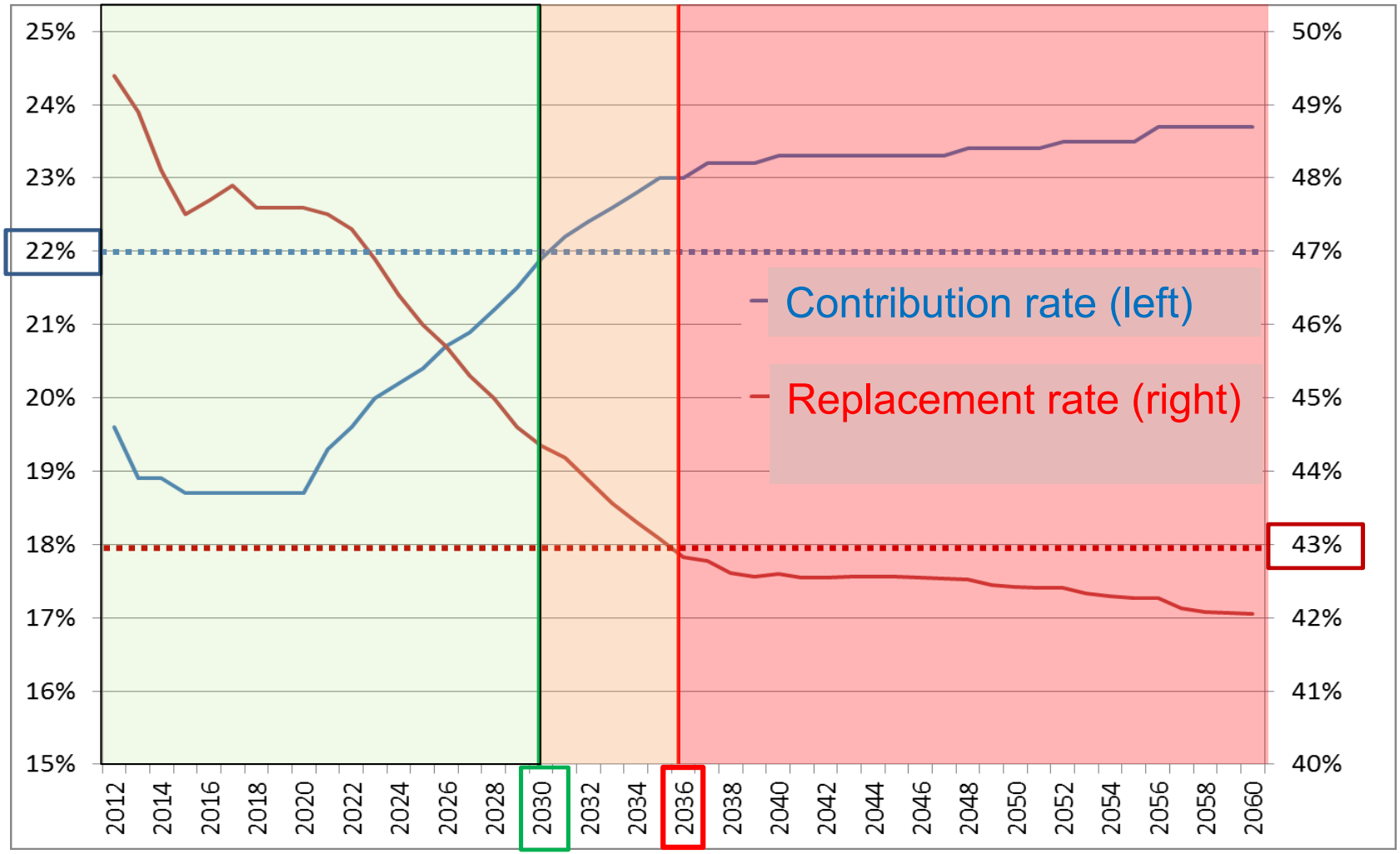
➢ **Hybrid DB/DC system:**

$$p_t/p_{t-1} = w_t/w_{t-1} \cdot (DR_{t-1}/DR_t)^{\alpha},$$

with $DR_t = NP_t / NW_t$ dependency ratio and $0 \leq \alpha \leq 1$

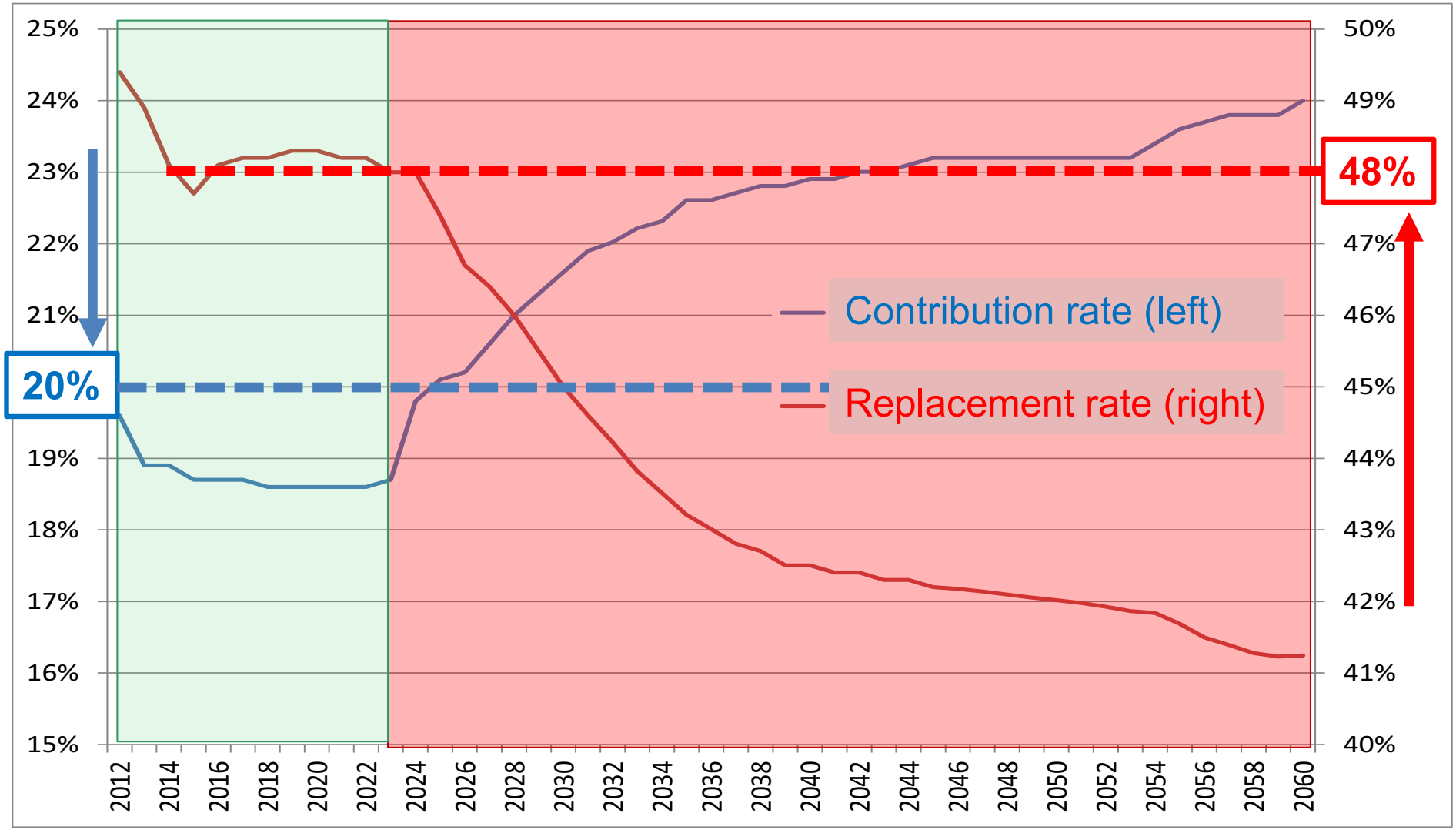
2. PAYG budget equation $\tau_t \cdot w_t \cdot NW_t = p_t \cdot NP_t$

2004 Reform

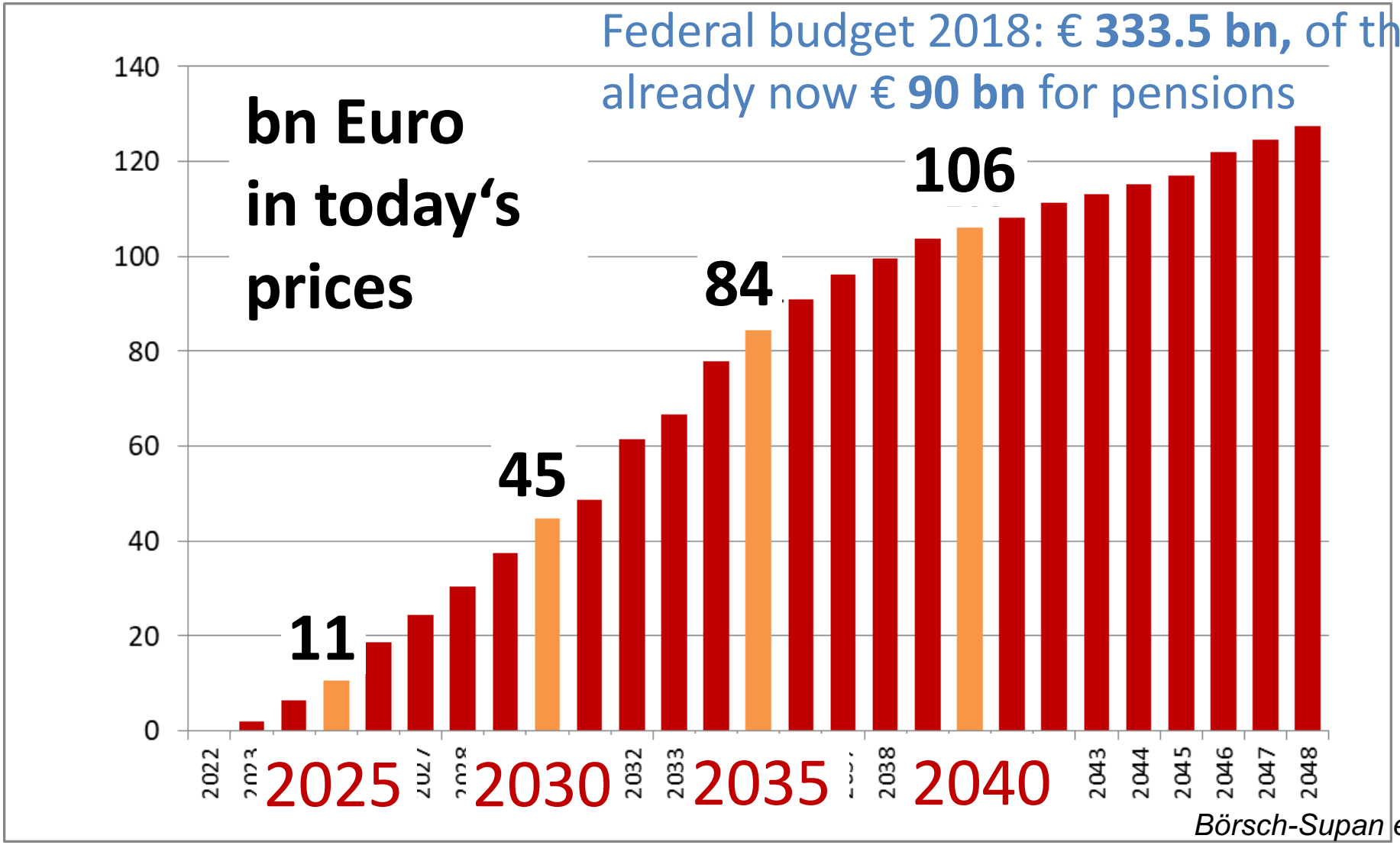


Quelle: Bis 2030: Rentenversicherungsbericht 2015.
Ab 2030: Max-Planck-Institut für Sozialrecht und Sozialpolitik (2016)

Reform backlash: „Haltelinie“



Tax costs of the "Haltelinien"



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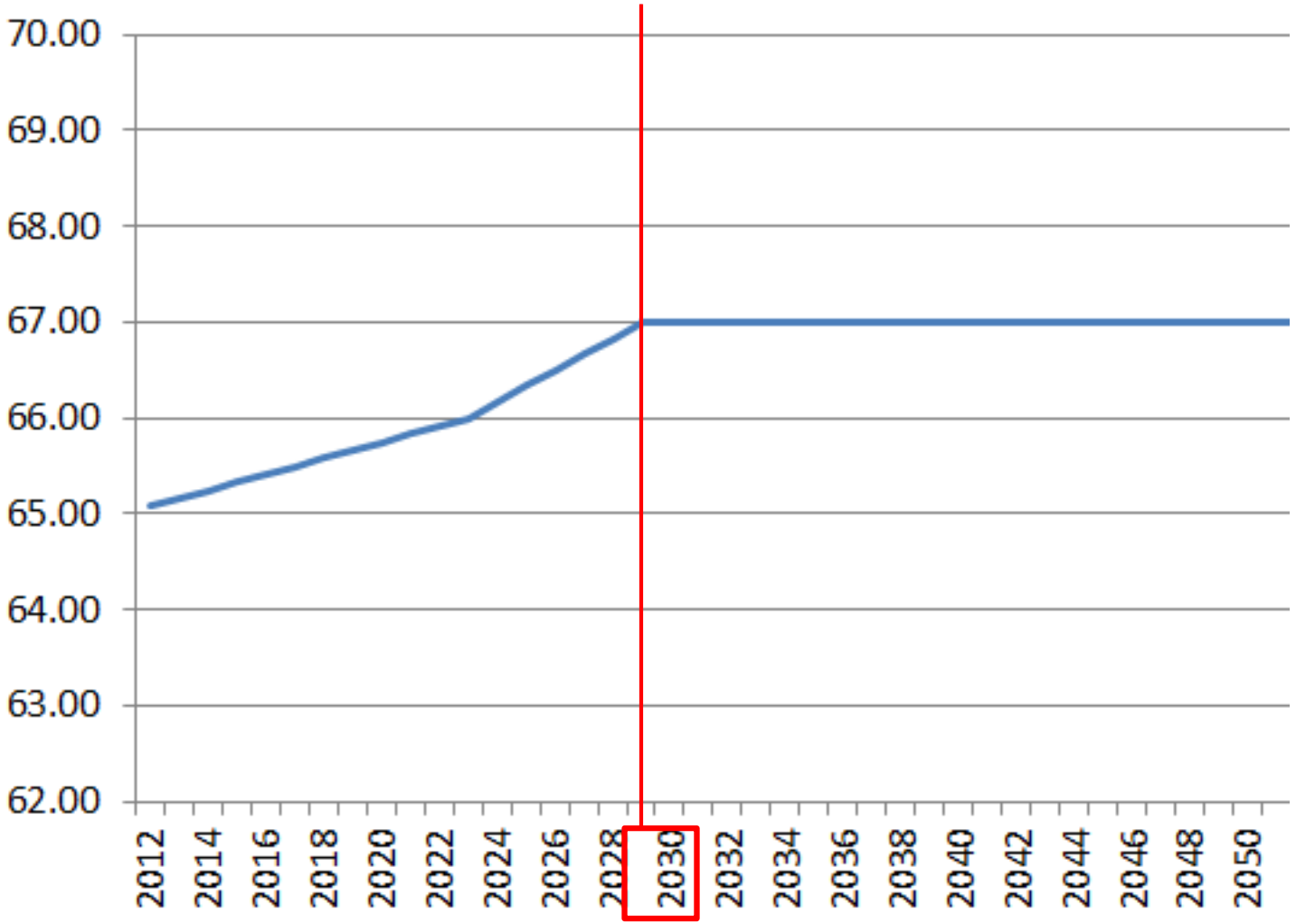
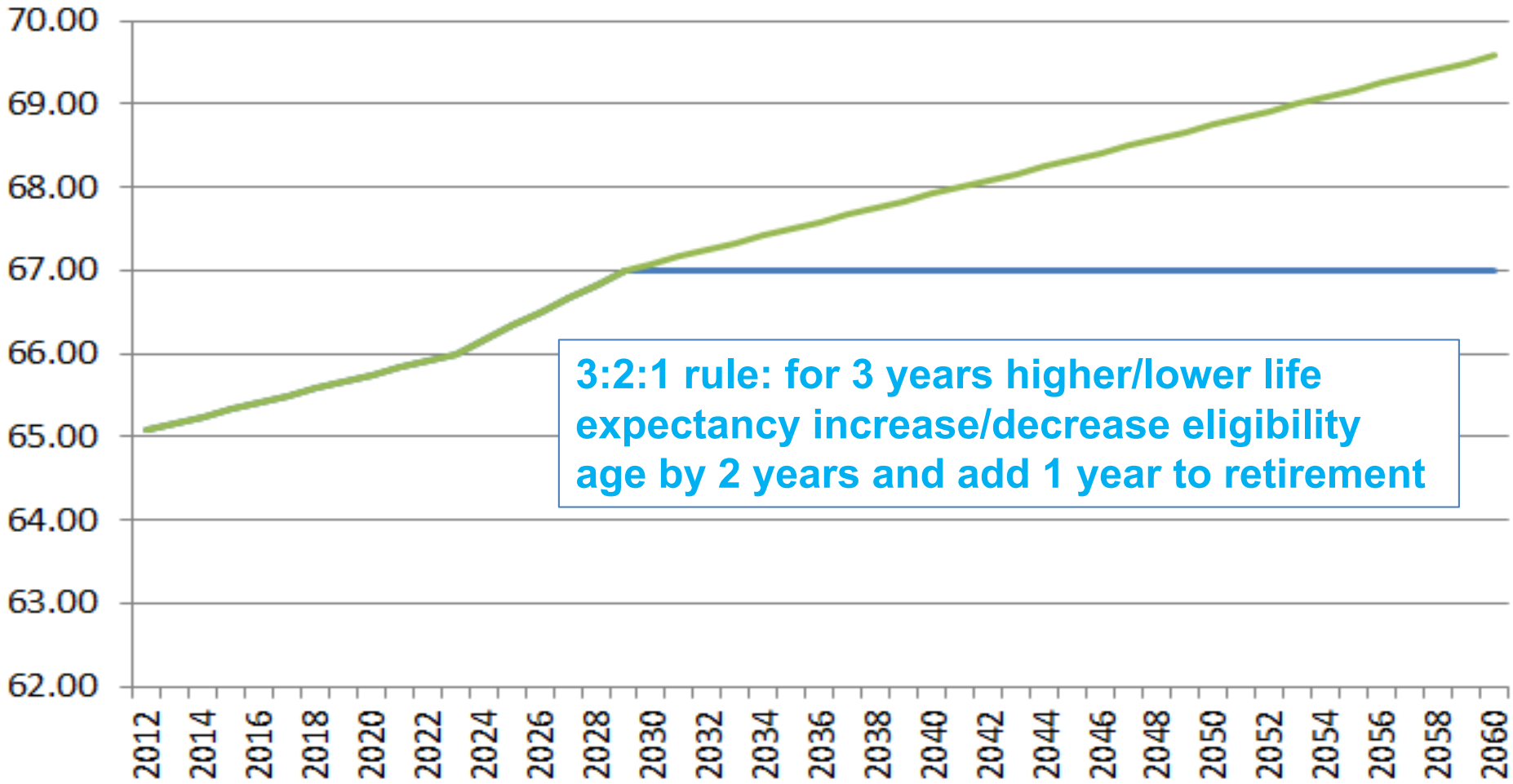
Statutory eligibility age

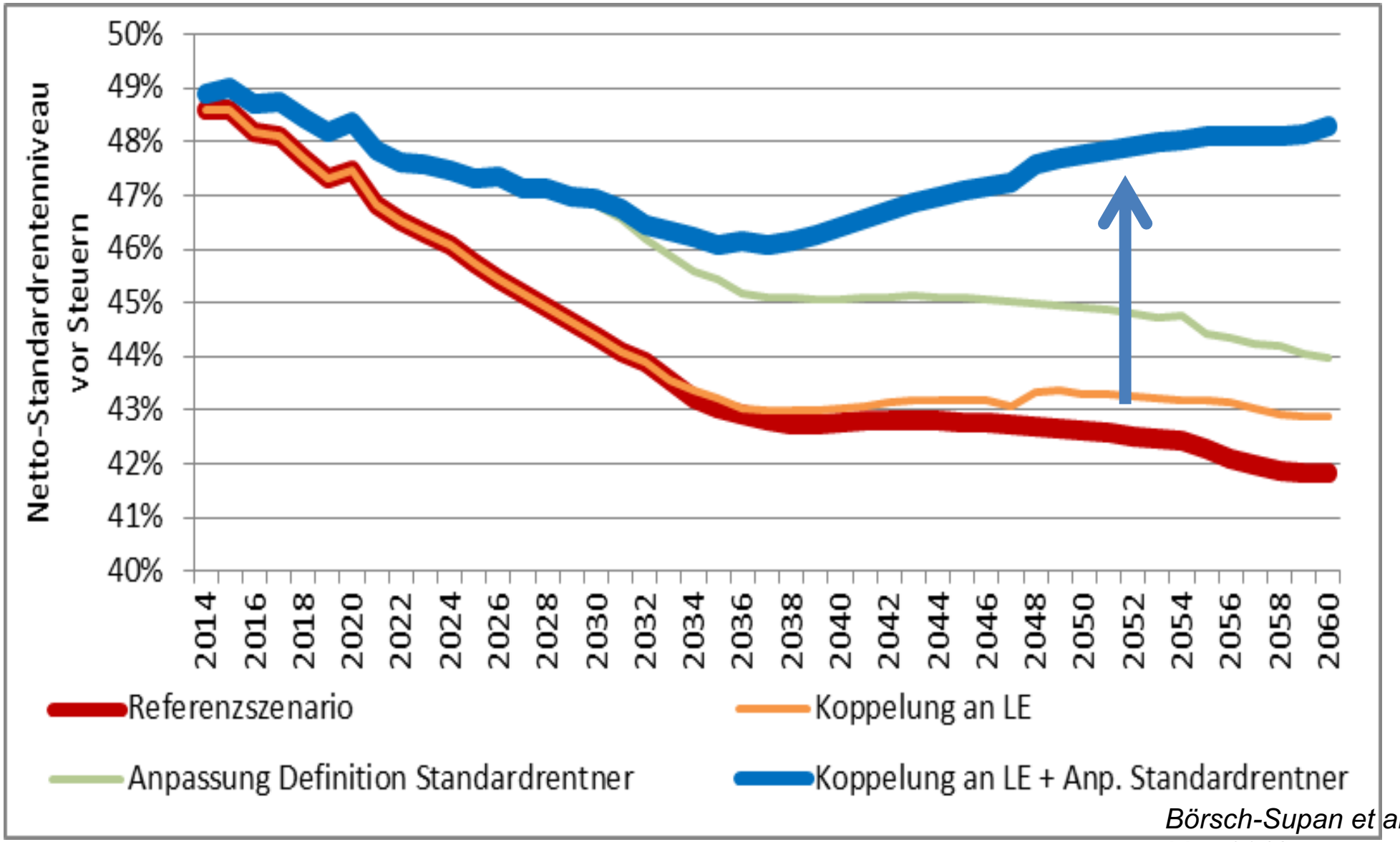


3:2:1 adjustment to life expectancy



Main challenge: reform backlash: „Rente mit 63“

Stabilizing the replacement rate



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Occupational & private pensions

1. Prevent poverty

Means-tested base pension

2. Reforms for the „normal“ worker

a. Pay-as-you-go pillar

Retirement age

Life expectancy

Replacement rate

System dependency

NDC

b. Fully-funded pillars

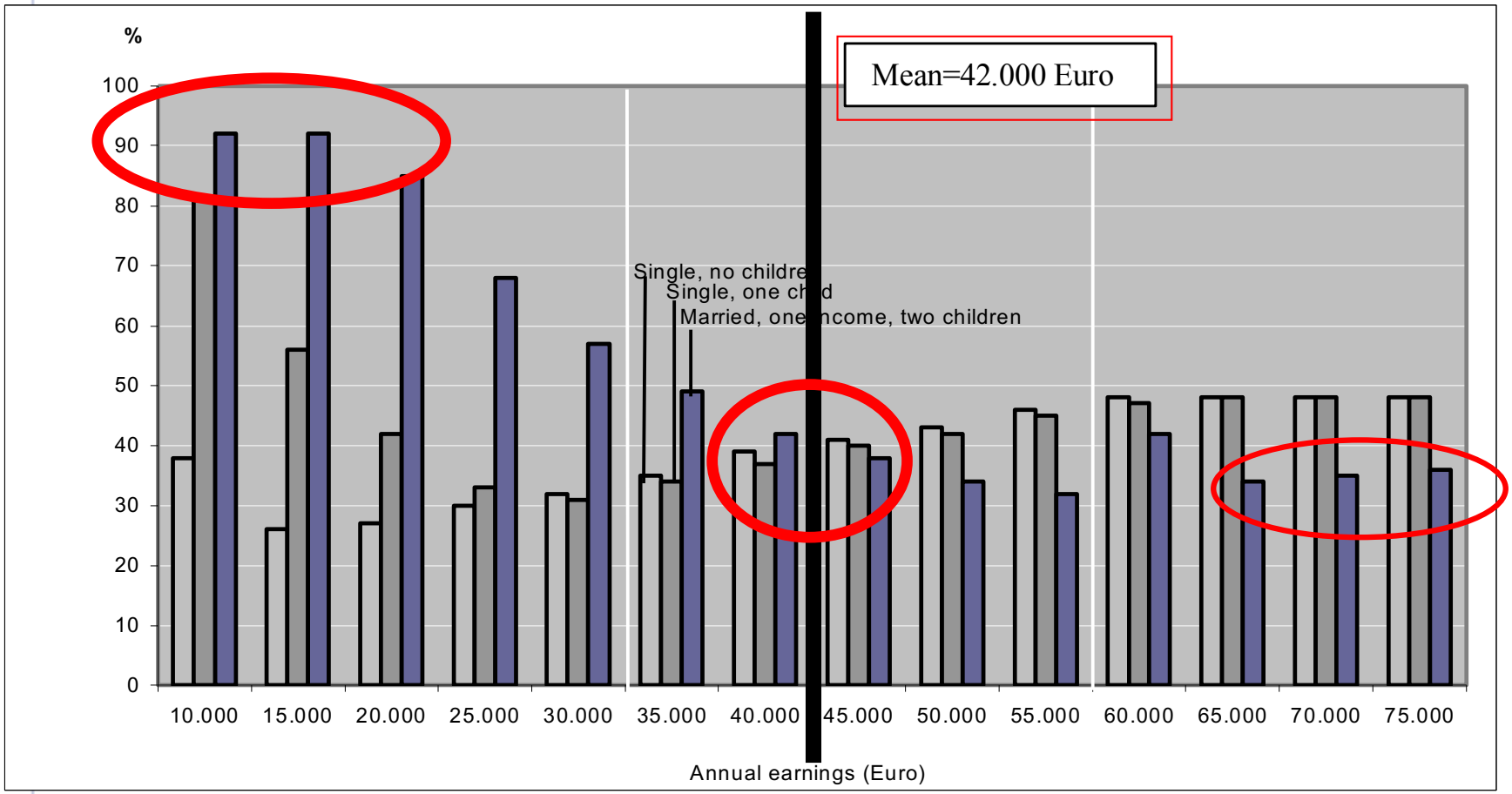
Mandatory (occupational, state)

Voluntary (individual)

„Nudging“

Establish a multipillar system

Subsidy as percent of total (!) contribution

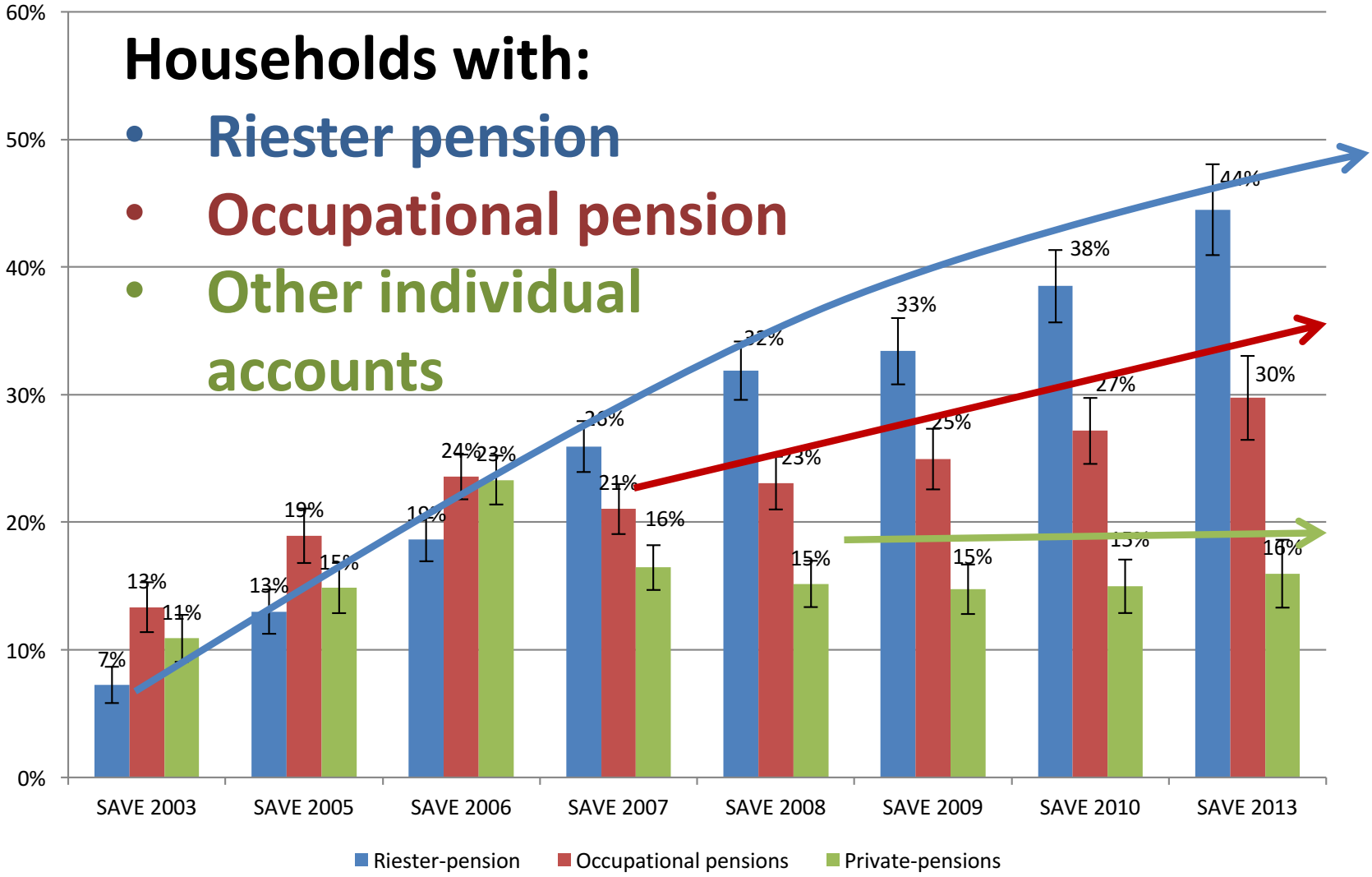


Note: Direct subsidy/the tax advantage as a percentage of savings in form of the new supplementary pensions.
Source: Deutsche Bundesbank (2002).

Establish a multipillar system

Households with:

- Riester pension
- Occupational pension
- Other individual accounts



Source: Börsch-Supan et al 2015

Lack of information

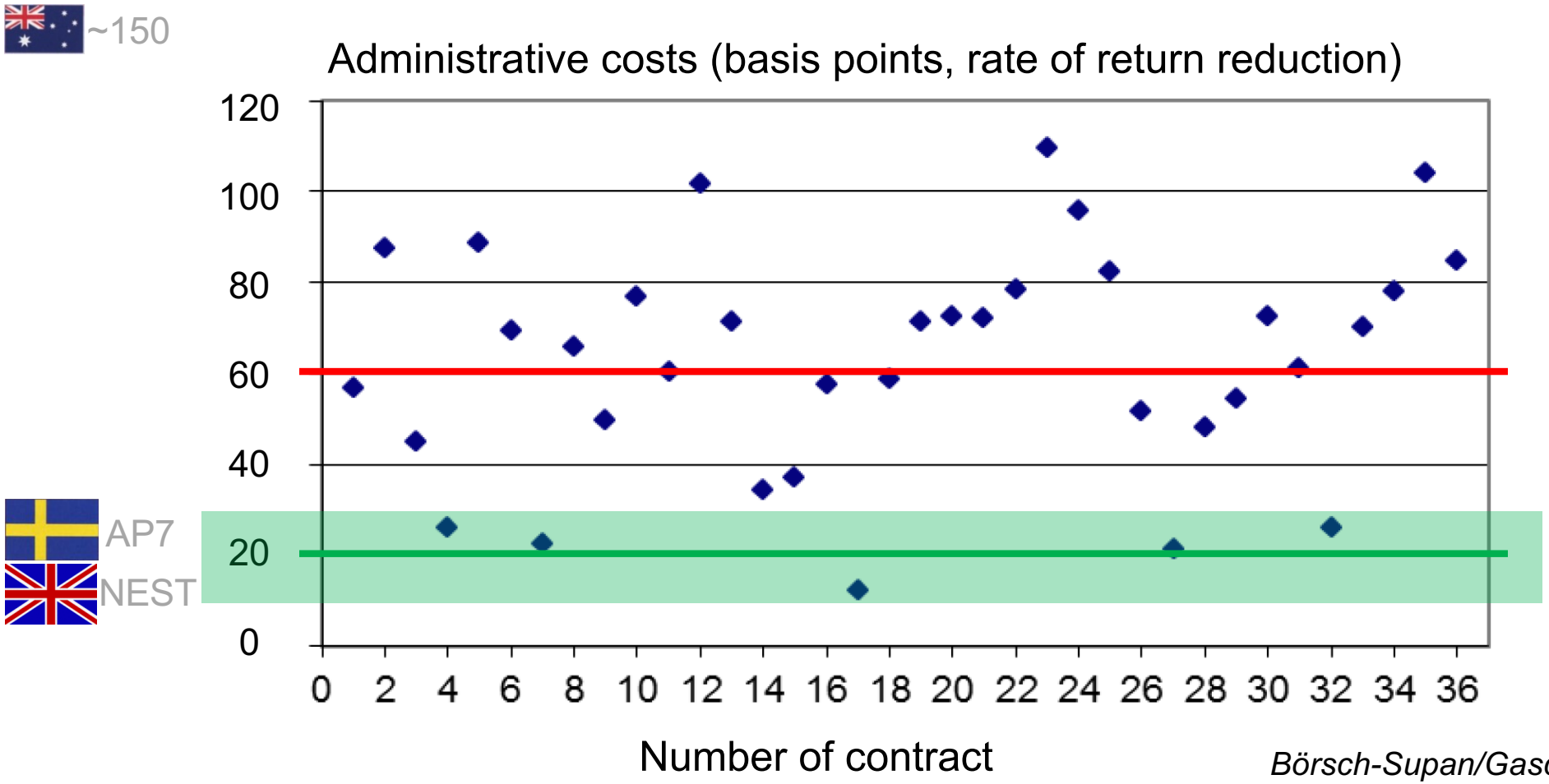
Are you eligible for a government subsidy?

	Not eligible (percentage of households)		
Income quintile	Law	Own assessement	Diff
	1	2	3
1	27,54	62.15	34,61
2	28,38	50.76	22,38
3	29,73	47.78	18,05
4	22,4	41.47	19,43
5	21,35	41.89	20,54
Total	26,27	50.58	24,31

Source: Coppola and Lamla 2013

Market failure

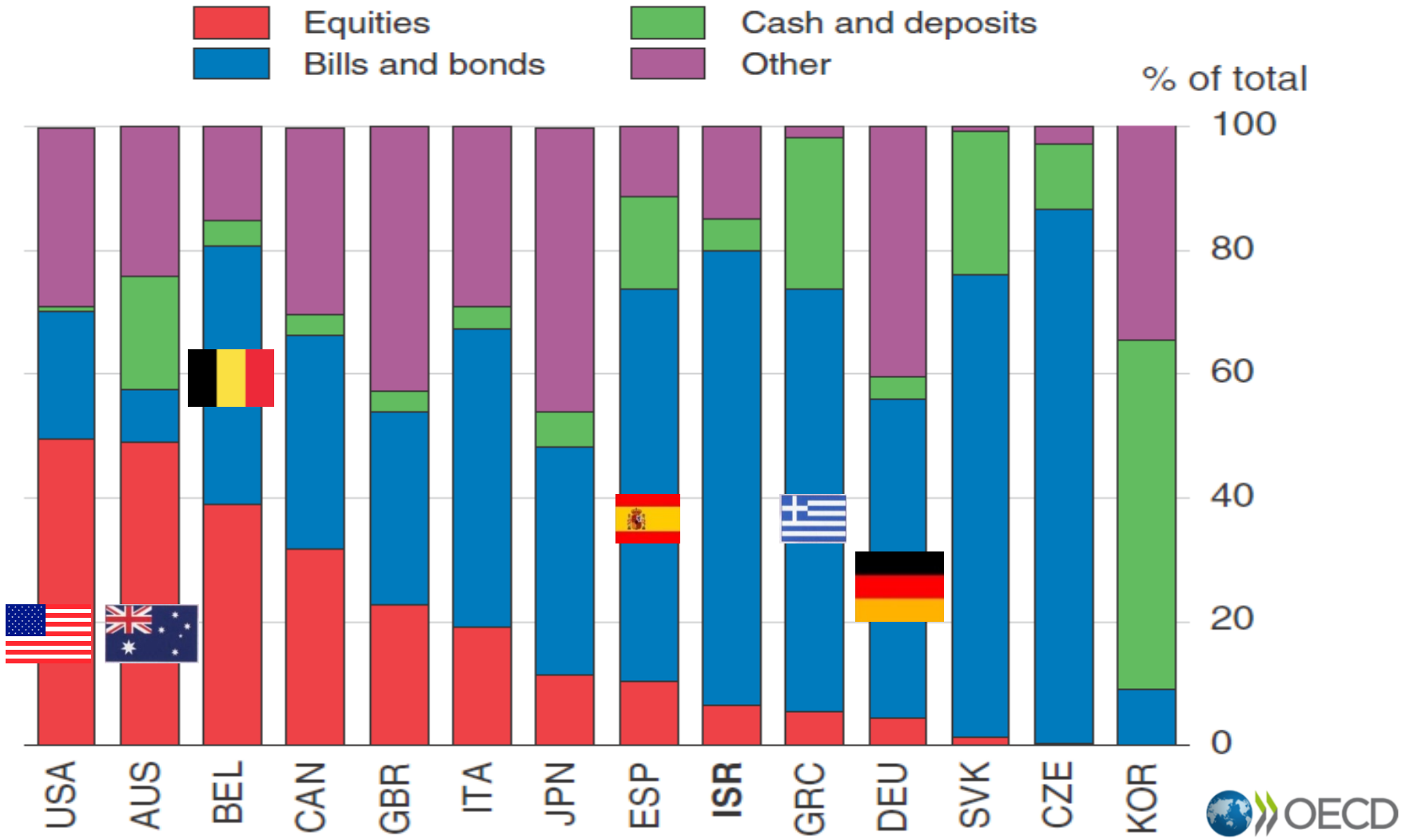
Huge variation in administrative costs



Börsch-Supan/Gasche
MEA-DP 2013

Asset allocation

D. Pension funds' asset allocation for selected investment categories, 2013



Conclusions

- **Germany's ageing challenges are large**
  - Old-age dependency almost as large as Mediterranean countries/Japan
  - Additional funding too late for the baby boomers
- **Many good reform ideas in "Agenda 2010"**
  - Political challenges of the sustainability vs. adequacy debate
  - Sustainability factor: Index benefits to dependency ratio
  - Basic pension, limits to dampen anxiety
  - [Automatic] adjustment of retirement age to life expectancy
- **But serious backlash: New eligibility age 63, new "Haltelinien"**
- **Voluntary second and third pillar took up but still serious problems**
  - Wide-spread lack of information: employees and employers
  - Markets failed to weed out costly pension plans