

International Perspectives on Pension Reform: Switzerland

Monika Bütler

University of St. Gallen & Netspar

Reimagining Pensions: The Next 40 Years

May 1 and 2, 2014

The Wharton School, University of Pennsylvania



Schweizerisches Institut für
Empirische Wirtschaftsforschung



Universität St.Gallen

Challenges are similar for all but solutions may be different

- Challenges:
 - (1) We live too long
 - (2) We want more choice and more guarantees
 - (3) Trade-off between incentives and poverty prevention
- Country-specific features
 - History of pension system
(high degree of path dependency)
 - Preferences / Values
Individual – collective
Redistribution
 - Labour market & educational system:
Flexibility
Mobility

... but solutions may be different

Why then look at Switzerland?

- Experience from the last 40 years for the next 40 years
 - Acclaimed 3 pillar system
 - Experience on annuitization decisions
- Behavioral economics is important – but we should not forget that strategic individuals are challenging as well
 - Annuitization decisions as an example
 - Trade-off between income protection and incentives
- Reforms will not happen in a political vacuum. Political constraints should be taken seriously.

Pensions around the world

	The Netherlands	Germany	France	Italy	Spain	Switzerland	UK	US
	% of current pension income, 2004							
1 st pillar	50	85	79	74	92	42	65	45
2 nd pillar	40	5	6	1	4	32	25	13
3 rd pillar	10	10	15	25	4	26	10	42

Why can't we save individually?

1) Pensions are **Savings**

- Myopia
- Redistribution
- Strategic behaviour

2) Pensions are **Insurance**

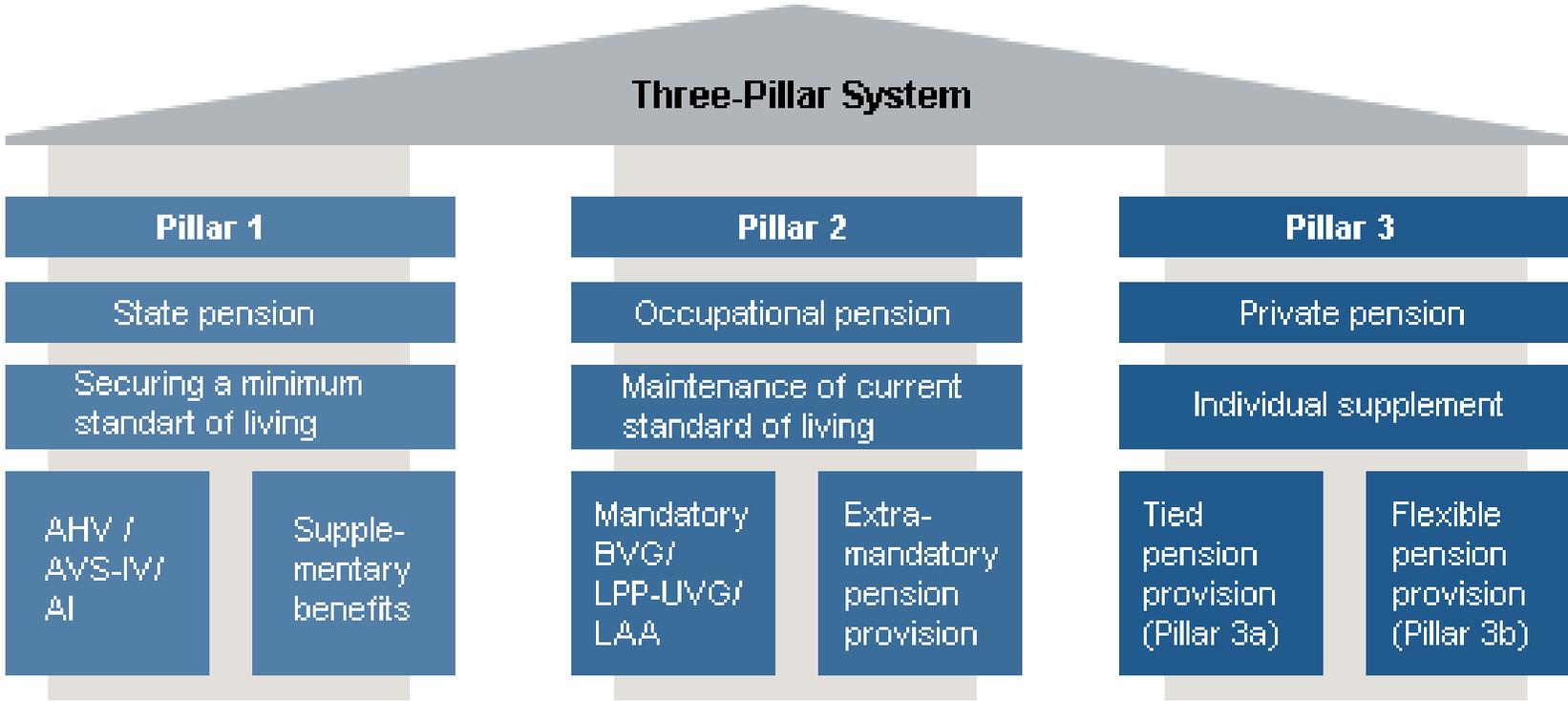
- Survivors
- Longevity
- Capital market risks



The Swiss Pension System: Overview

- The Swiss pension system is based on 3 pillars
 - 1st pillar: mandatory pay-as-you-go system
 - 2nd pillar: fully funded occupational pension scheme
 - 3rd pillar: non-mandatory private pension scheme
- Gross replacement rate of 1st and 2nd pillar: ~ 60%
- Net replacement rate amounts to ~ 70-80% (- 100%)
- When income does not cover basic needs in old age, means-tested benefits may be claimed

The Swiss Pension System: Overview



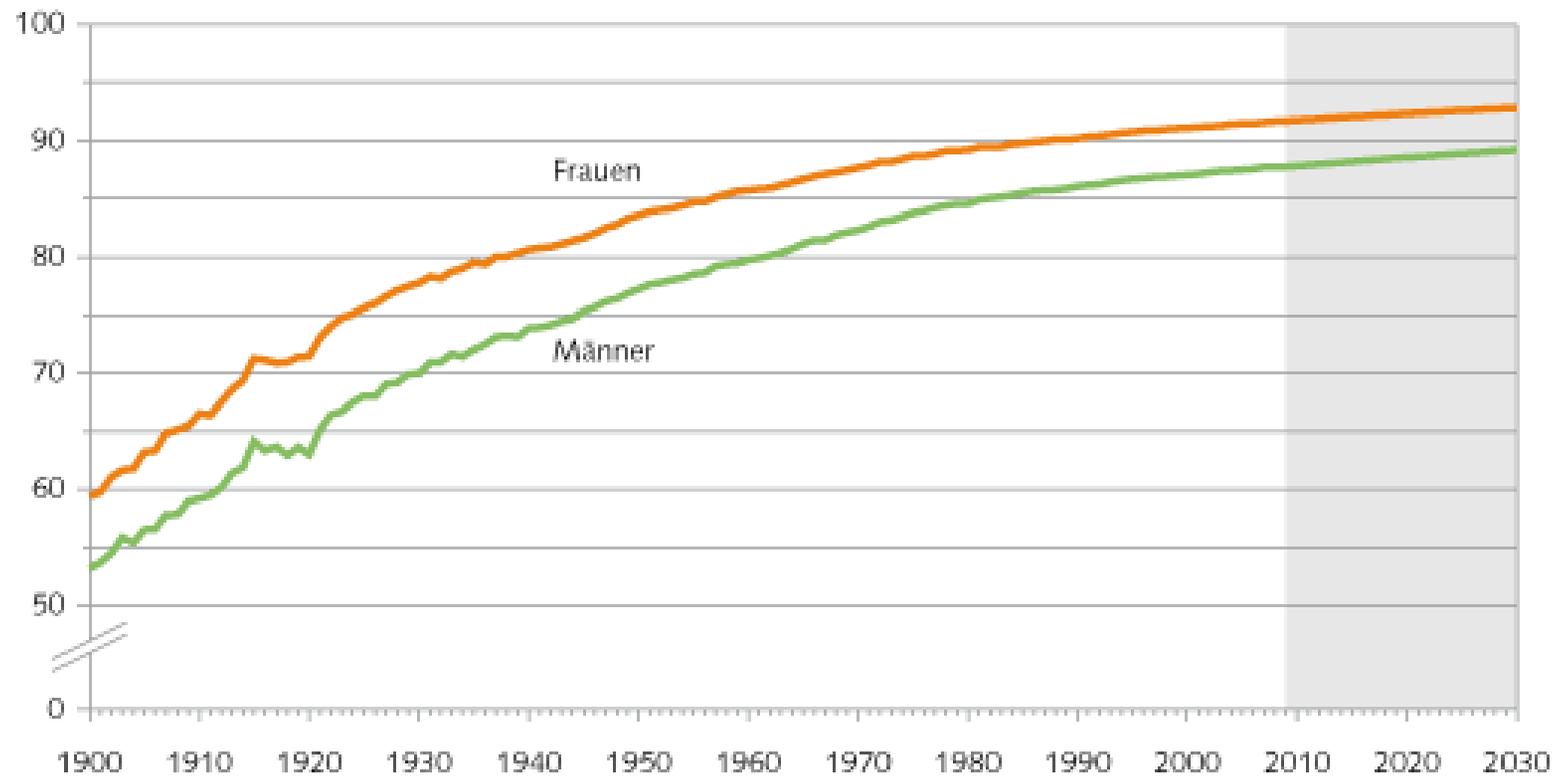
The Swiss Pension System: 1st Pillar

- Introduced in 1948
- Provides basic **subsistence level of income** to all retirees
- Contribution rate is 8.4% of wage earnings, of which employer pays ½. (+ 20% out of general tax revenues)
- Benefits depend **on contribution years** & (much less) on average income: min: 13,680 CHF/a, max: 27,360 CHF
- Majority of retirees qualify for pension close to maximum
- Add. benefits for surviving spouse and dependent children
- Statutory retirement age is 64 for women and 65 for men; earliest RA: 62/63 at benefit reduction of 6.8% per year

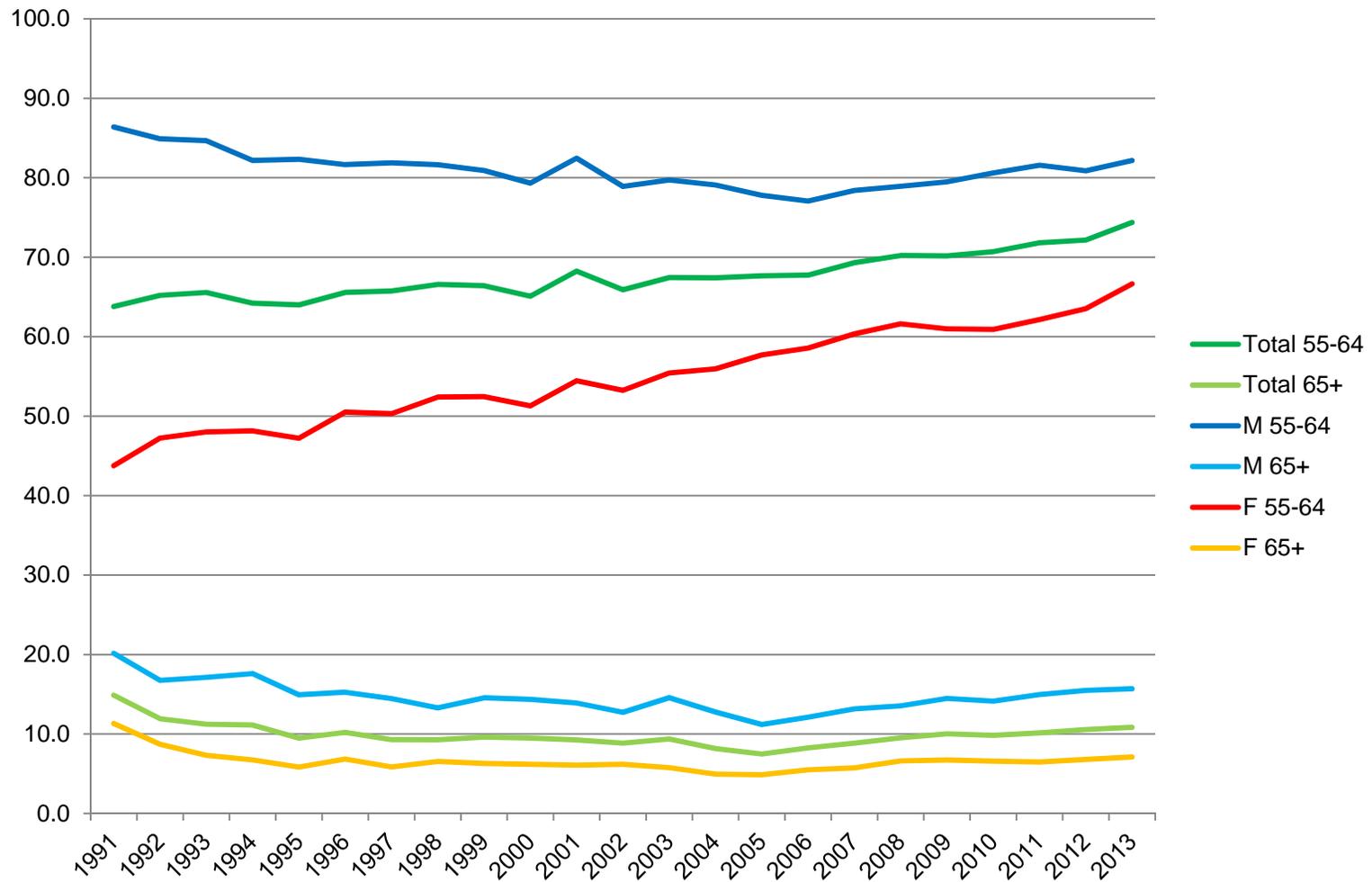
Strong increase in life expectancy

Durchschnittliche Lebensdauer

In Jahren bei der Geburt, nach Geburtsjahrgang



High labor force participation of elderly



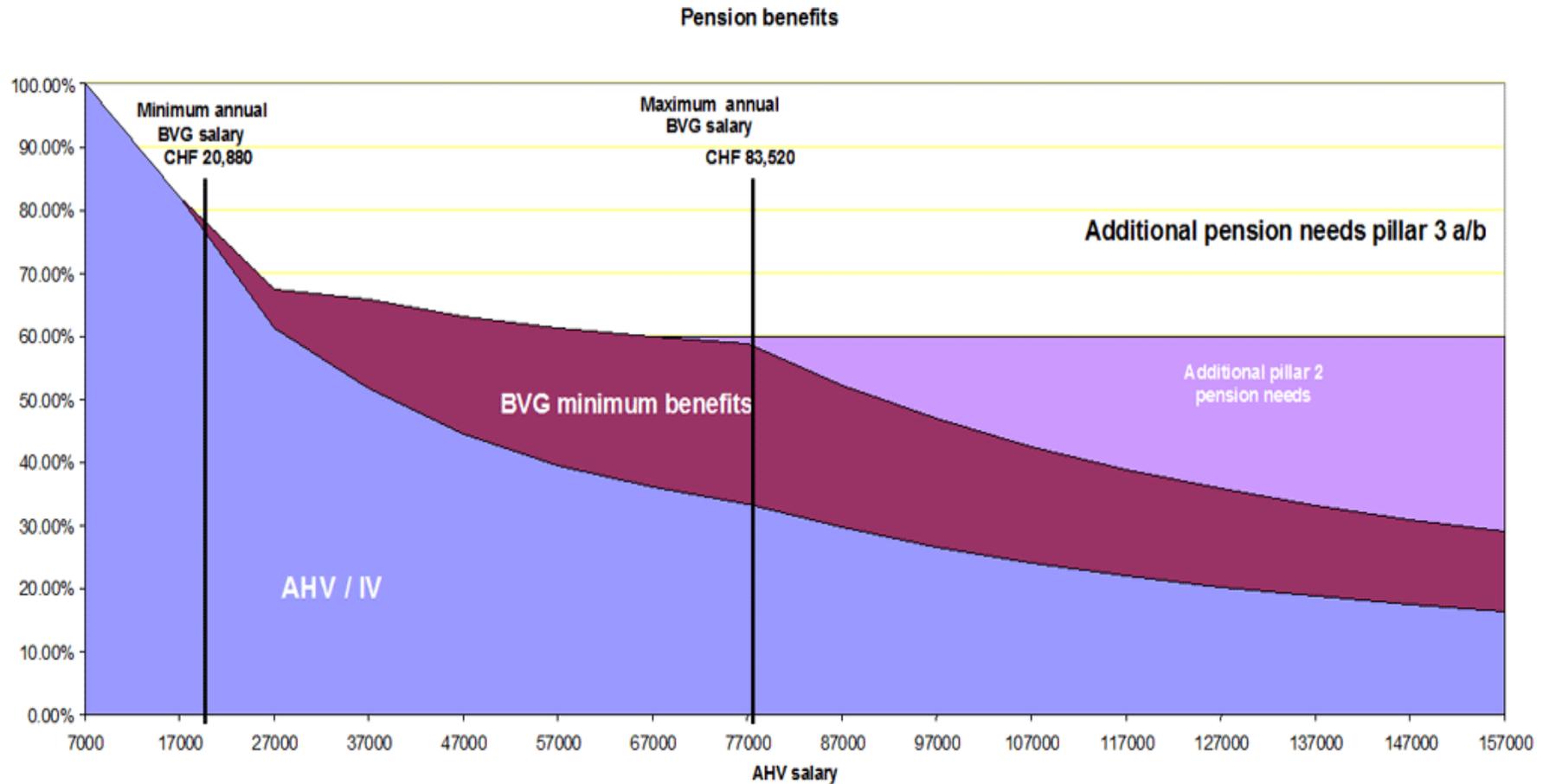
The Swiss Pension System: 2nd Pillar

- **Mandatory** participation if annual earnings \geq 20,000 CHF
- 96% of working men, 83% of working women are covered
=> Important in attracting skilled workers
- Majority of pension funds are «**defined contribution plans**»
- Very fragmented: \pm 2'000 active pension funds
- **Mandatory part:** Income from 20,000 CHF to 83,000 CHF
Pension funds are required to insure mandatory part
Stringent regulation
- **Super-mandatory part:** Income above 83,000 CHF
Pension funds not required to provide insurance in the super-mandatory part, but most do. Relaxed regulations

The Swiss Pension System: 2nd Pillar

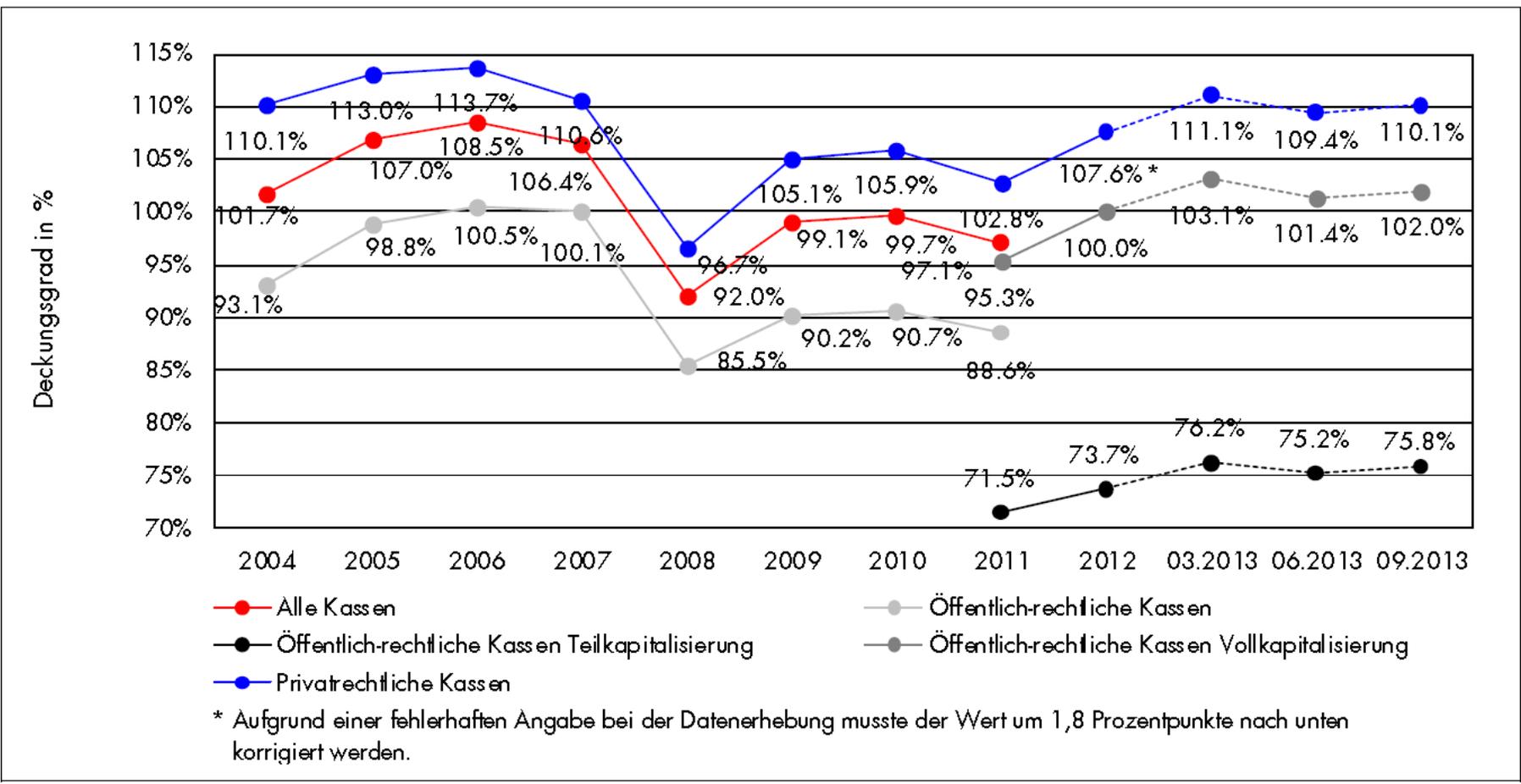
- Contributions (age-dependent!): Fraction of employee's eligible salary; employer covers at least half
- Accumulated contributions are transferable across funds
- Pay-out options at retirement, often default option: Annuity, lump sum or mix of the two, cash-out limits equal to 50 or 25% in some funds, must be declared in advance
- Calculation of annuity:
Proportional to accumulated assets K , annual nominal annuity $B = \gamma * K$, conversion rate γ depends on ret. age.
Recent cuts in γ in mandatory and super-mandatory parts
- Also includes children and survivor benefits

High replacement rates



Serious funding issues in second pillar

Abbildung 1: Entwicklung der vermögensgewichteten Deckungsgrade, 2004 bis September 2013



The Swiss Pension System: 3rd Pillar

- Earmarked savings enjoying preferential tax treatment
 - 3a (tied): up to 6'800 CHF/a (employed), 34'000 (self-employed), fully tax-deductible
 - 3b: retirement insurance contracts, preferential tax tr.
- Conditions for withdrawal:
 - Retirement (from age 60)
 - Purchase of home
 - Self-employment
- Given high replacement rate of 1st and 2nd pillar: mainly tax savings device. (Taxed separate from other income at withdrawal)

DC & DB Swiss Style

- If DB (disappearing): Contributions important!
 - Future benefits based on final salary
 - contribution gaps must be closed for full benefits, additional contributions in case of pay increase
- If DC: **Extensive income guarantees!**
 - Minimum interest rate ($\geq 0!$) on accumulated assets
 - Minimum conversion rate for annuity (mandatory part)
 - Re-insurance of pension up to 150% mandatory coverage
 - No obligation for retirees to cover financial shortfalls
- **Strong political constraints on scheme!**

Not rational? (de facto) defaults have a huge impact on annuitization

	<u>Annuity</u>	<u>Partial L.S.</u>	<u>Full L.S.</u>
A (clothing)	<u>69.64</u>	13.09	17.27
B (public infrastructure) (DB)	<u>84.68</u>	14.57	0.75
C (industry)	<u>50.79</u>	25.13	24.07
D (food)	<u>25.81</u>	–	74.19
E (industry) (DB)	<u>90.00</u>	10	–
F (industry)	<u>10.26</u>	<u>89.74</u>	–
G (industry)	<u>93.33</u>	<u>6.67</u>	–
H (industry)	<u>55.62</u>	19.75	24.64
I (city)	<u>71.43</u>	–	28.57

- peer effects
- framing
- default option \neq default option

Source: Bütler & Teppa (2007)

Framing: More on annuity streams than on capital

Versicherungsausweis per 30.6.2010 (Beträge in CHF)

Allgemeine Angaben

Versicherte Person		Personalnummer	
SV-Nummer		Geburtsdatum	
Versicherungsart	Sparversicherung	Ordentliche Alterspensionierung	30.6.2045
Versicherte Besoldung	36,534.00	Versicherungsumfang	52.50 %
Monatlicher Arbeitnehmerbeitrag	231.40		

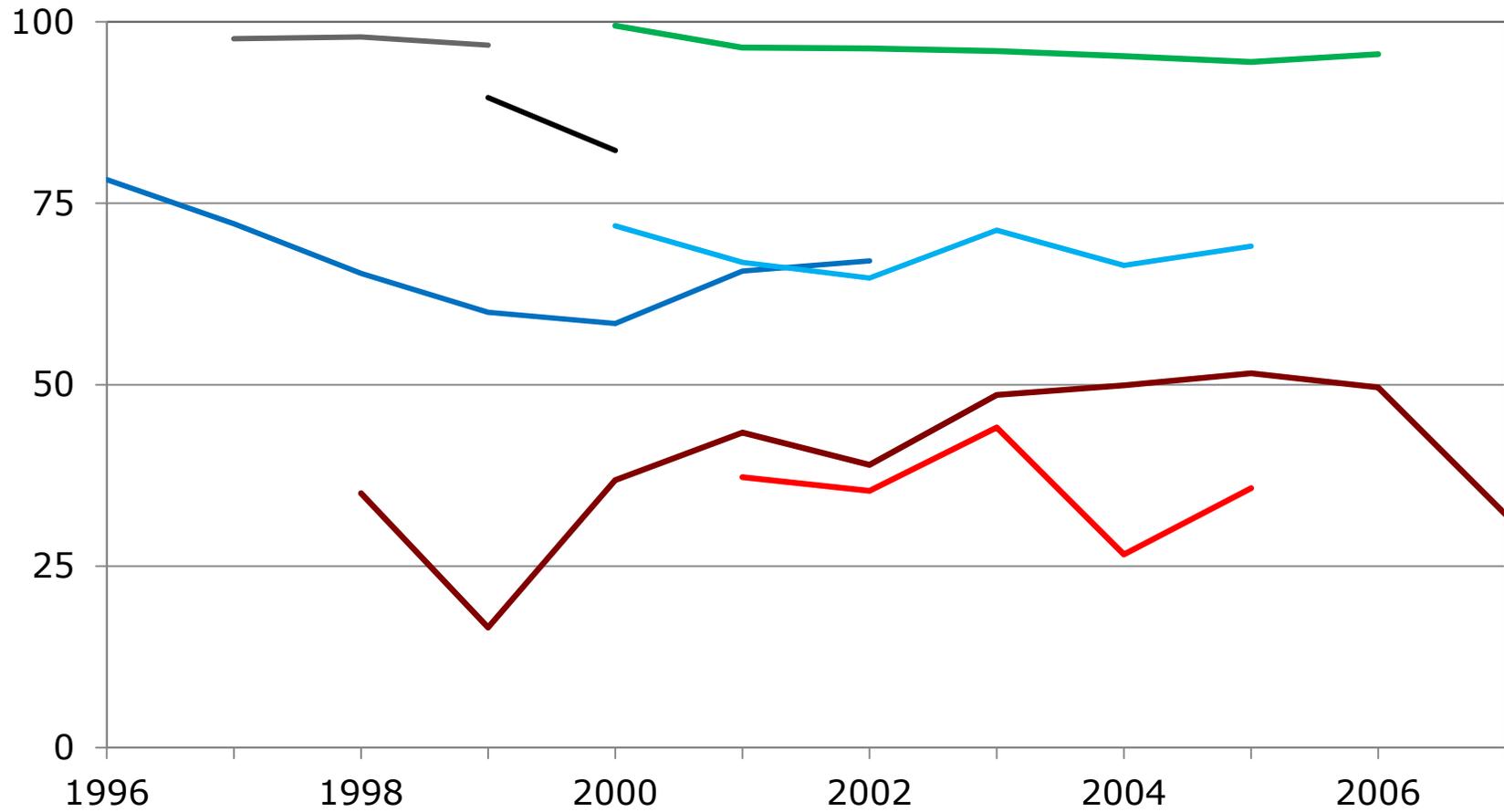
Voraussichtliche jährliche Rentenleistungen

Altersrente	25,372	Waisen- oder Kinderrente je anspruchsberechtigtes Kind	3,245
Invalidenrente	16,227		
Ehegattenrente (Witwenrente)	9,736		

Theoretische Austrittsleistung

Total	11,739.85	Übrige Angaben	
Darin enthalten		projiziertes Sparguthaben im Rücktrittsalter	352,382.80
persönliche Einzahlungen:		Altersguthaben nach BVG	3,407.40
Freizügigkeitseinlagen	3,067.90	Für die Finanzierung selbstgenutzten Wohneigentums verfügbarer Höchstbetrag	0.00
Zusätzliche Einlagen	0.00		
Beiträge bis 30.6.2010	6,548.75		
Total persönliche Einzahlungen	9,616.65		

Annuitization rates for men in %



— Insurance I

— Insurance II

— Textile 1

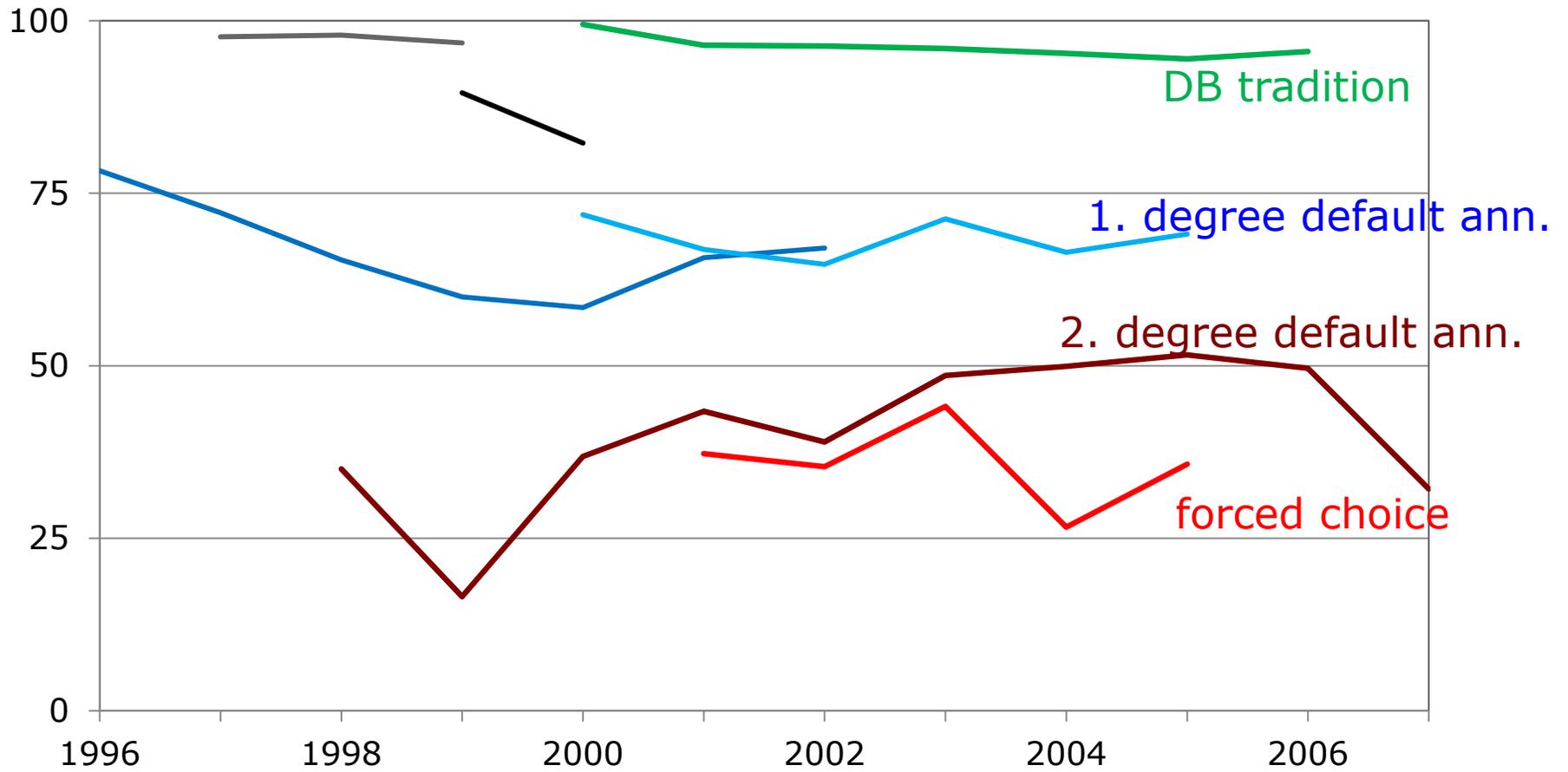
— Textile 2

— Manufact.A

— Manufact.B

— Public Service

Annuitization rates for men in %



— Insurance I

— Insurance II

— Textile 1

— Textile 2

— Manufact.A

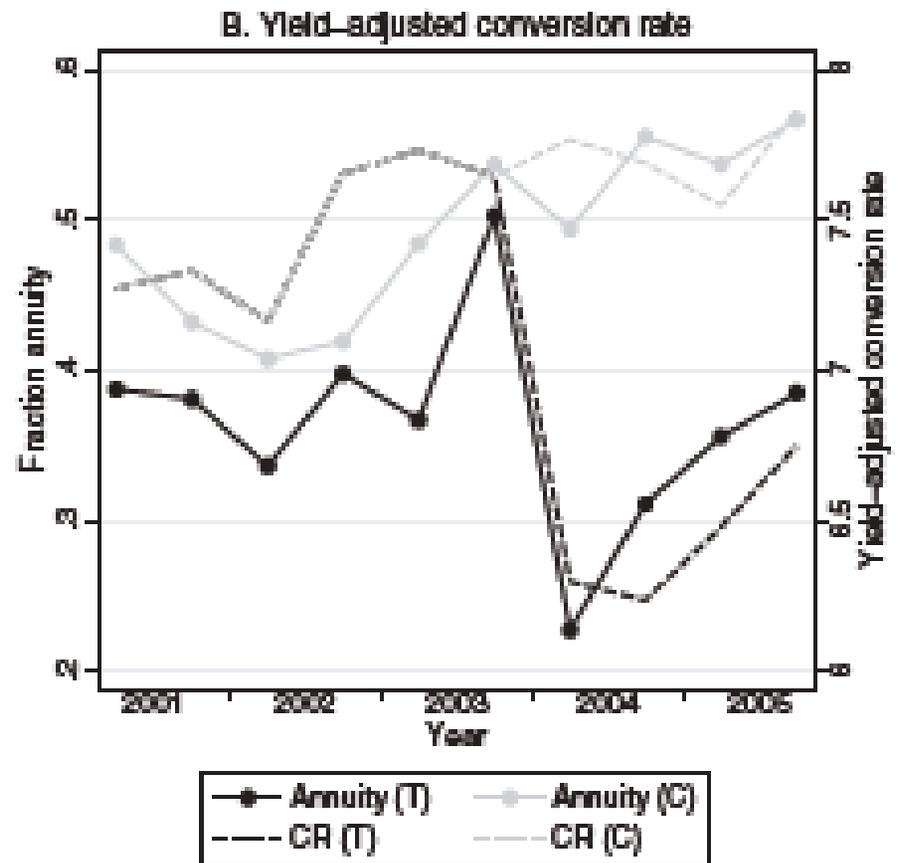
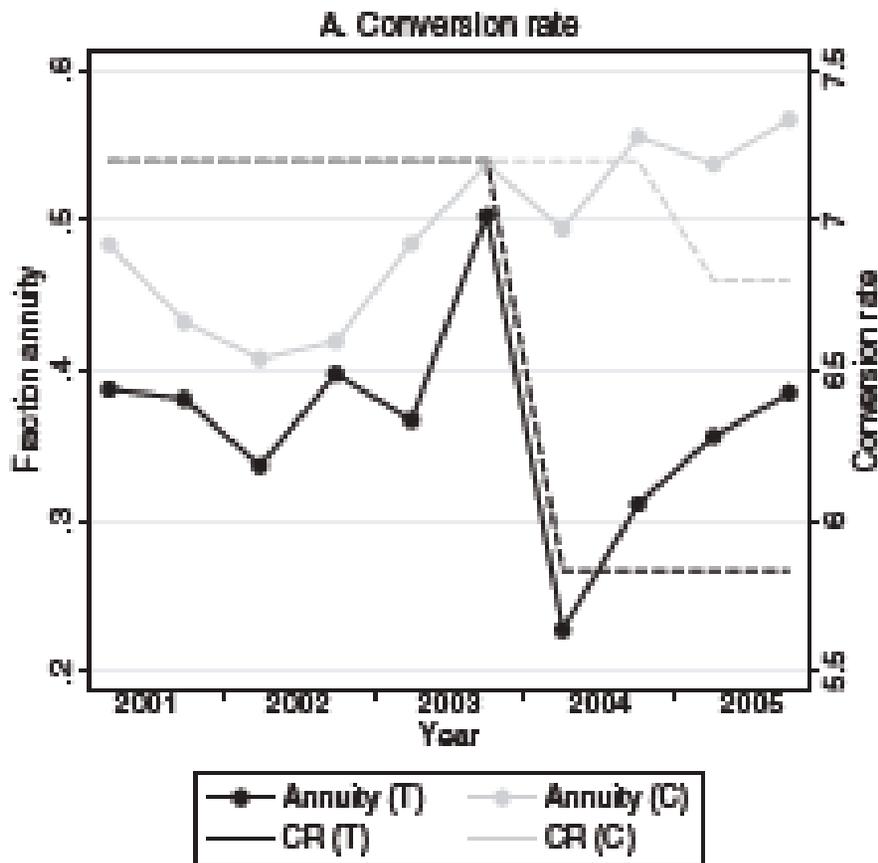
— Manufact.B

— Public Service

Conversion rate (risk) influences annuitization

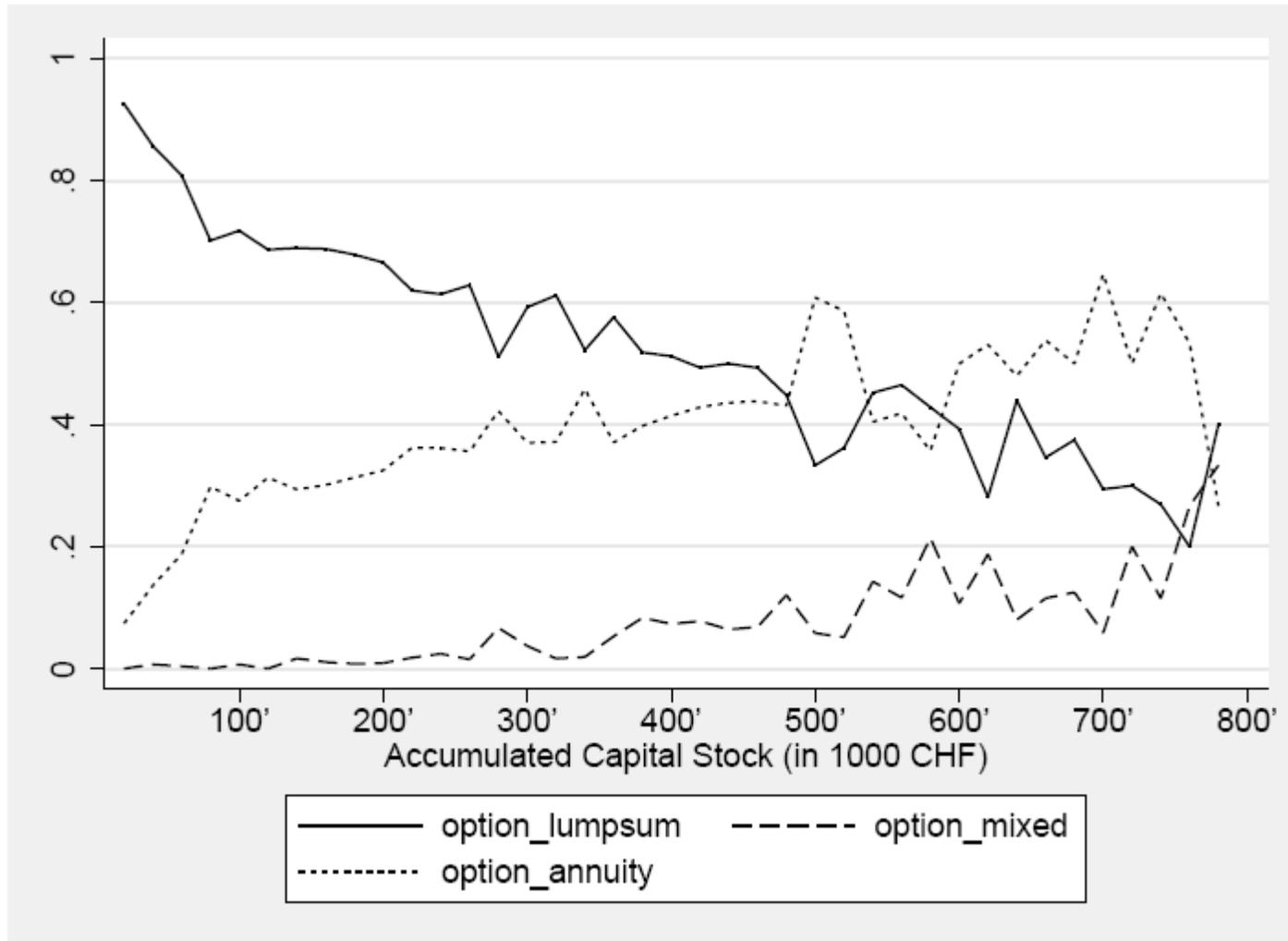
- Conversion rate at time of retirement is likely to influence the choice between an annuity and the lump sum
- Bütler, Staubli & Zito (2013) analyze a sudden 19% conversion rate decrease for some annuities in 2004
- Strong effects of policy change on cash-out behaviour
- Value-elasticity of annuity demand similar to previous studies (Brown, 2001; Bütler & Teppa, 2007), despite very different sources of exogenous variations.

19% reduction of **conversion rate** in super-mandatory part of some insurance comp.



Bütler, Staubli und Zito (2013, ScandJoE)

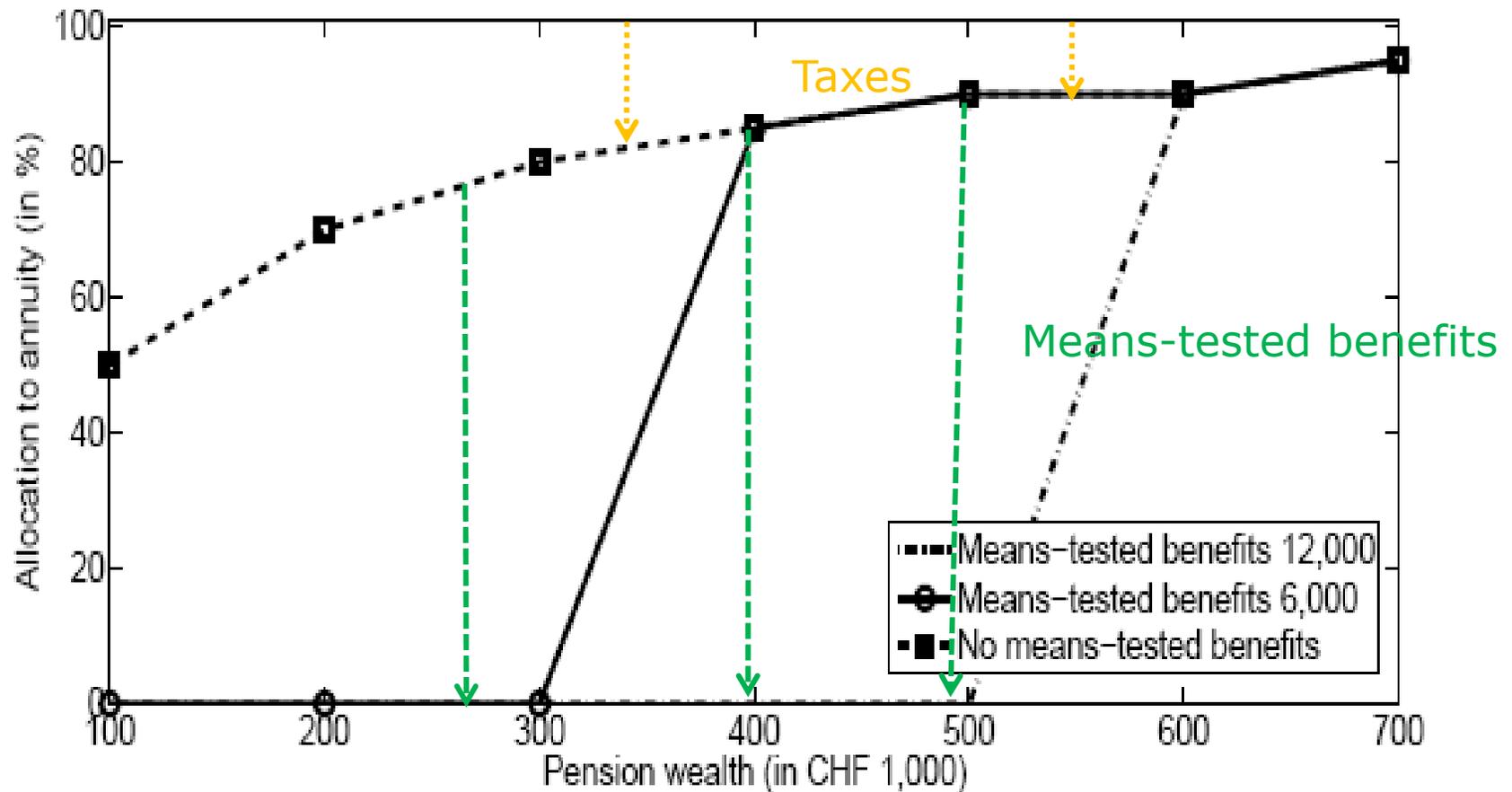
A robust finding: **Annuitization increases with accumulated retirement capital**



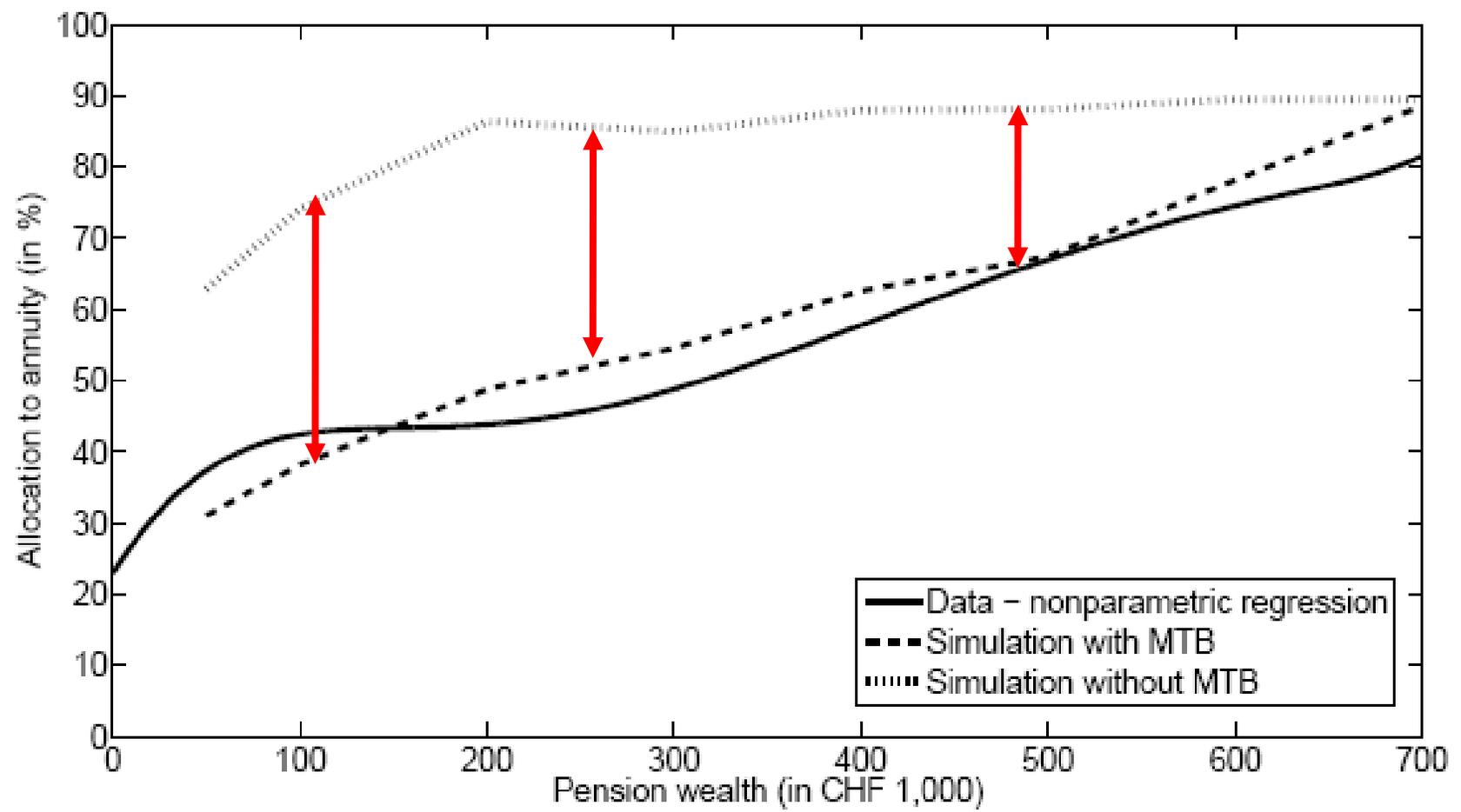
Too rational? Strategic reactions to means-testing benefits

- Guaranteed minimal income often exceeds minimal benefits provided by public pension system.
 - Consequence: **cashing out pension wealth can be individually optimal**
 - Low capital stock: cash-out always optimal
 - otherwise: Trade-off between maximizing money's worth of benefits (cash-out) and smooth consumption (annuitize)
 - Always expensive for the tax payer!
 - Bütler, Peijnenburg & Staubli (2012): **Quantitative assessment with realistic life-cycle model.**
- **Key question: How high should minimal income be in old age?**

Simulated life-cycle model: means-tested benefits reduce optimal annuitization



Simulated life-cycle model: means-tested benefits **reduce optimal annuitization**

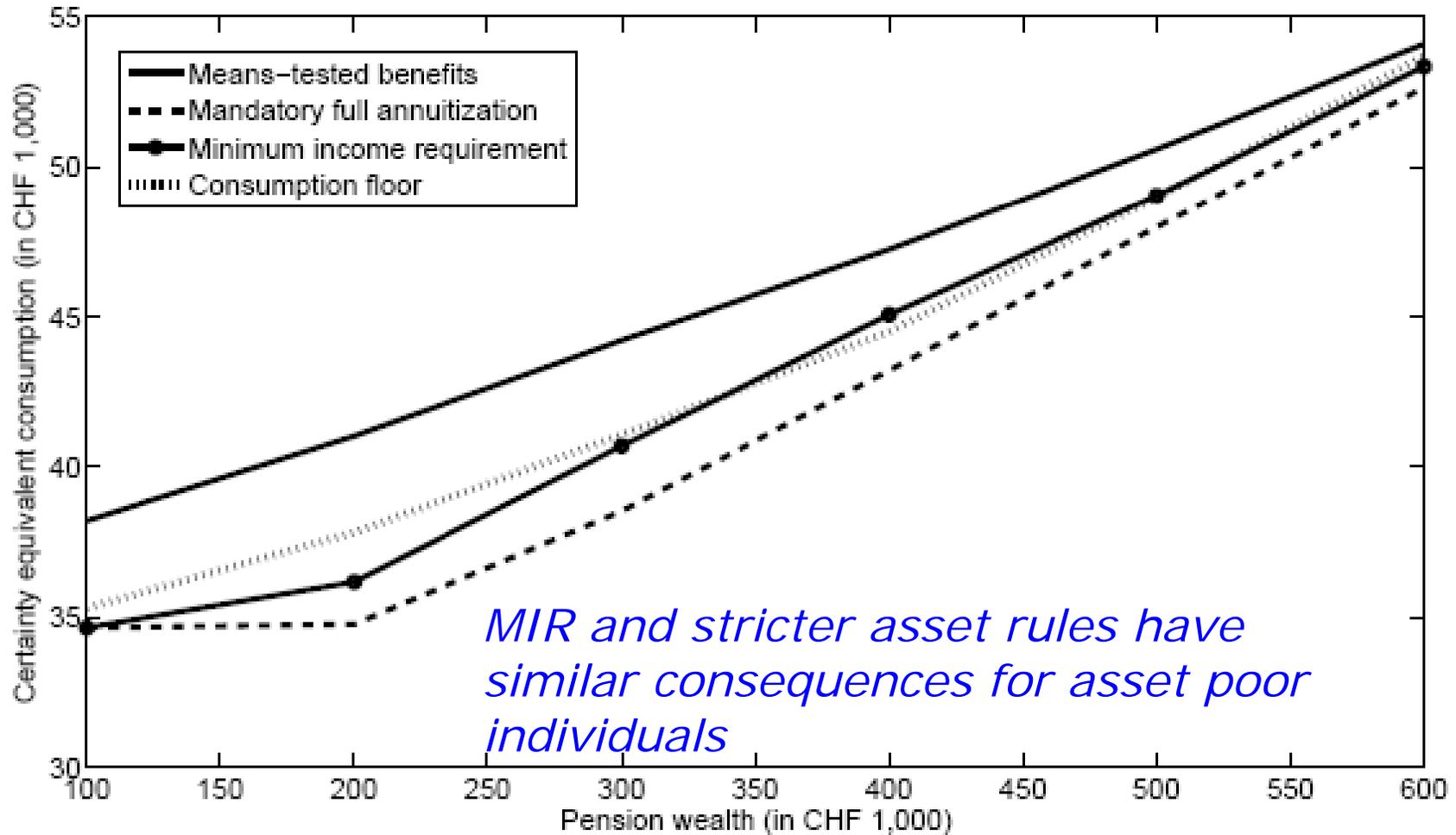


Means-tested benefits are expensive! But what would be alternatives?

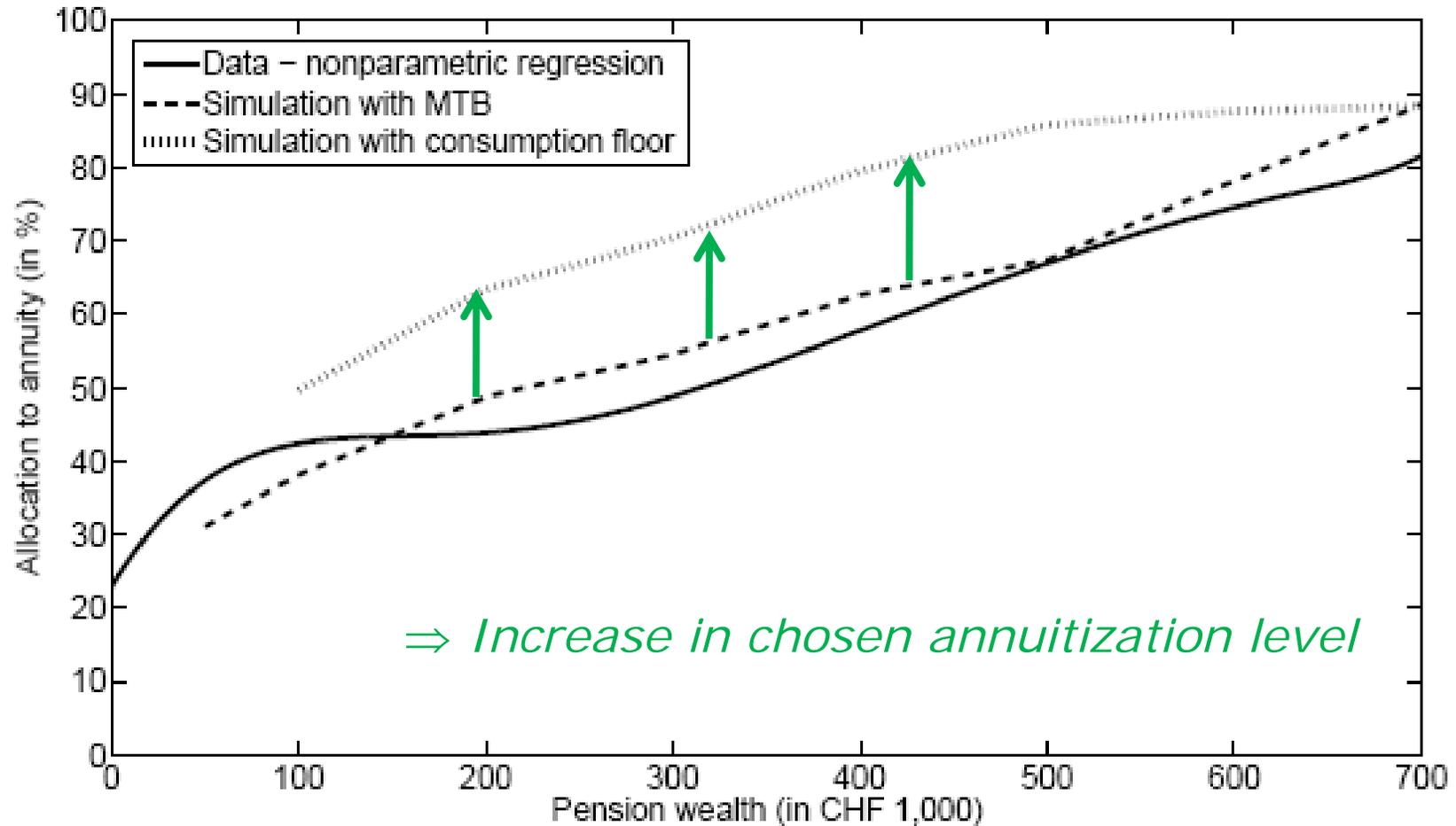
- (1) Mandatory full annuitization
- (2) Minimal income rule (MIR): mandatory annuitization to the income level guaranteed by MTB.
- (3) Stricter asset tests (consumption floor): same income guarantee as MTB, but stricter eligibility rules

pension wealth	MTB	mandatory full annuitization	MIR	consumption floor
100	146	101	101	95
200	106	24	38	51
300	77	3	20	28
400	57	0	14	12
500	44	0	11	1
600	34	0	8	0

Alternatives make poorer individuals worse off



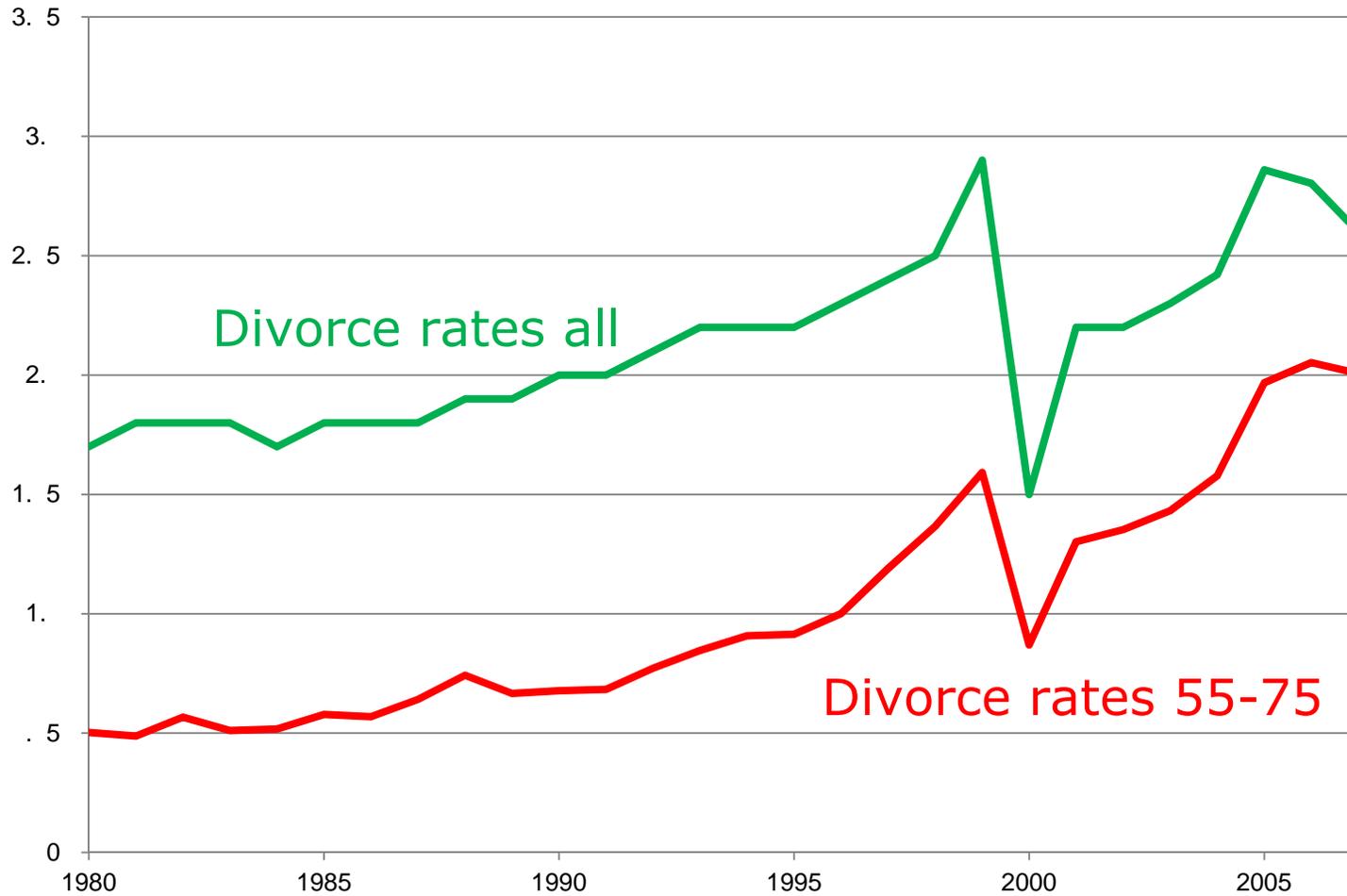
Stricter asset rules increase optimally chosen annuitization rates



Public pension system as re-insurance for individuals and pension providers

- Minimum income guarantees in constitutions
- Often implemented by means-tested benefits (MTB)
- MTB can prevent poverty in old age ...
... but generate undesired incentives
 - (early retirement)
 - capital instead of annuity in second pillar
 - No precaution for long-term care even for those with sufficient financial means.
- Re-insurance can also create undesired incentives for pension providers (too much risk taking, gambling for resurrection)
- Outlook: strong increase in costs to be paid by tax payers.

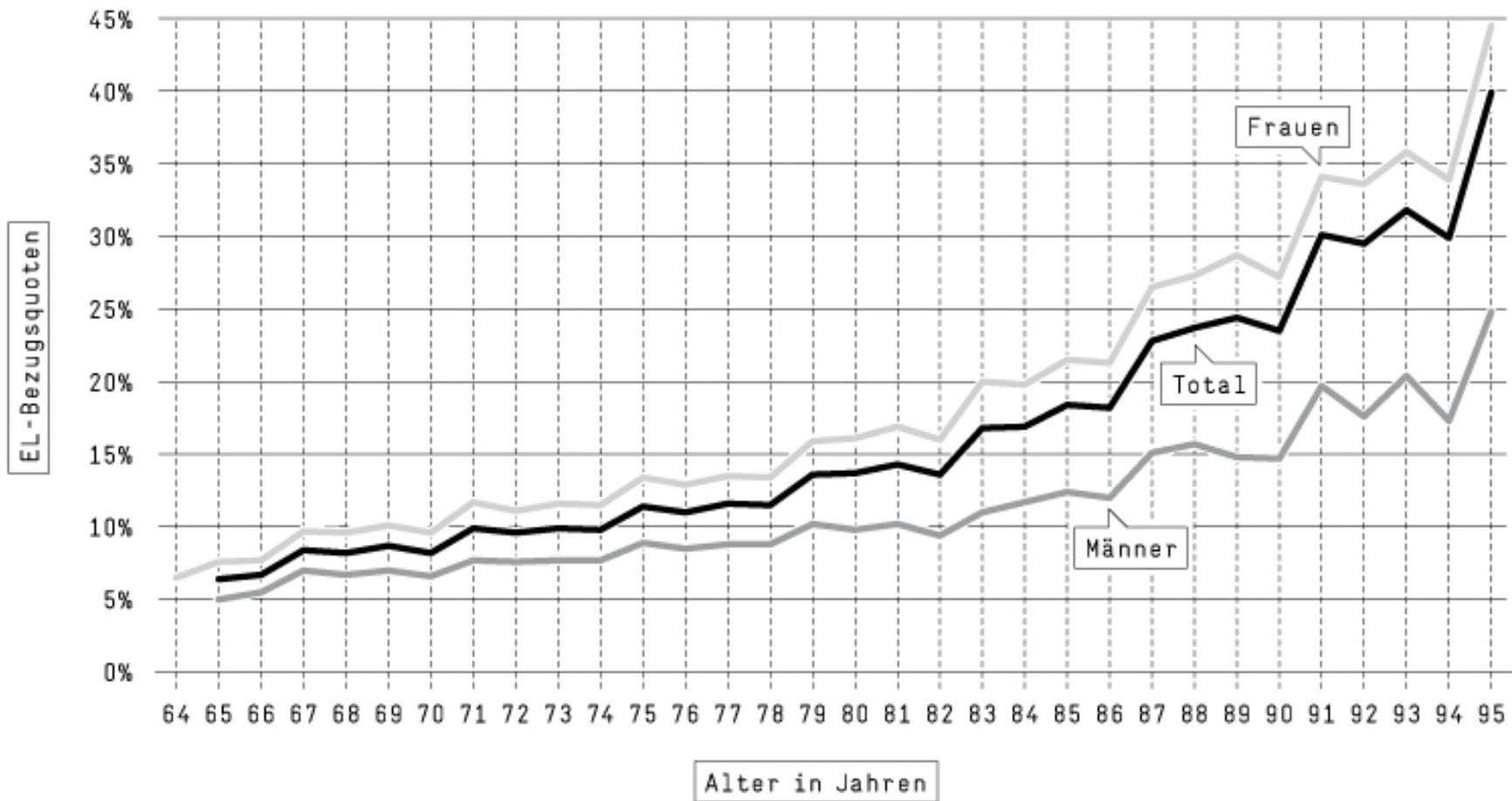
Another example for strategic decisions: Timing & likelihood of divorce



What about long-term care?

- Why should we care? Is it really just a "retirement rather than aging problem"?
 - Life-expectancy increases
 - Healthy life-expectancy increases
 - BUT: Average age onset of dementia only slightly later
- we might have soaring LTC spending to be paid out of general government revenues
- at the same time, many elderly with substantial pension resources from the second pillar
- integrate a self-insurance mechanism in second pillar, at least for the higher-income individuals?
(contingent pay-outs of mandatory annuity)

Share of individuals receiving means-tested benefits increases with age (=> LTC expenditures)

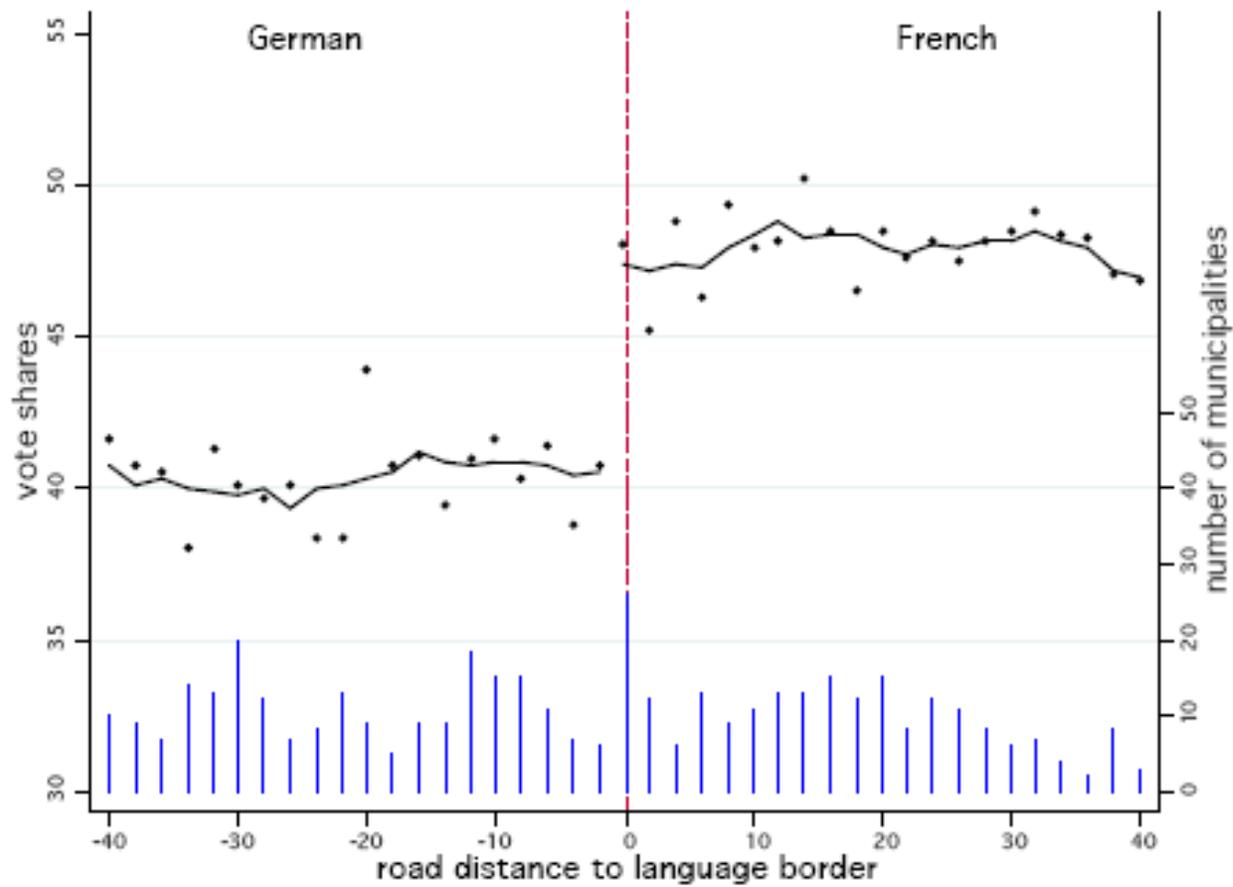


Even if we knew where to go there are political constraints ahead

- Decentralized income replacement schemes (family => firms => government) in old age has been largely replaced by publicly provided or regulated plans.
- More equity and transparency comes at a price:
 - More vested interests
 - More difficult to reform system
 - Political constraints are often binding
- Role of preferences often culturally determined (Example of Switzerland)
 - Very large differences in Switzerland between linguistic regions despite very similar socio-economic situation.
 - Direct democracy exacerbates difficulties due to factual line item veto

Culture and Preferences: A striking example on preferences for redistribution.

Figure 3: Voting preferences of French and German speaking municipalities



Source: Eugster & Parchet

Another example: Referendum on conversion rate (annuity factor)

- Yes, it is an economic parameter...
- Nonetheless, a referendum challenged proposed reduction of conversion rate (annuity factor) – and won by a very large majority (72% opposed reduction)
- Usual suspects (income, socioeconomics, politics) matter, BUT
 - «culture» much more decisive
 - single most important determinant: **trust in government**
- Consequence: muddling through => law allows for «silent» cuts in case of financial constraints.

Challenges for (Swiss) pension System

- Demography (as everywhere else)
- Funding (as everywhere else)
 - Implicit redistribution from the young to the old
- Strategic dissavings
 - Interaction between 2nd pillar and means-tested benefits
- Financing of long term care
- Political feasibility of reform