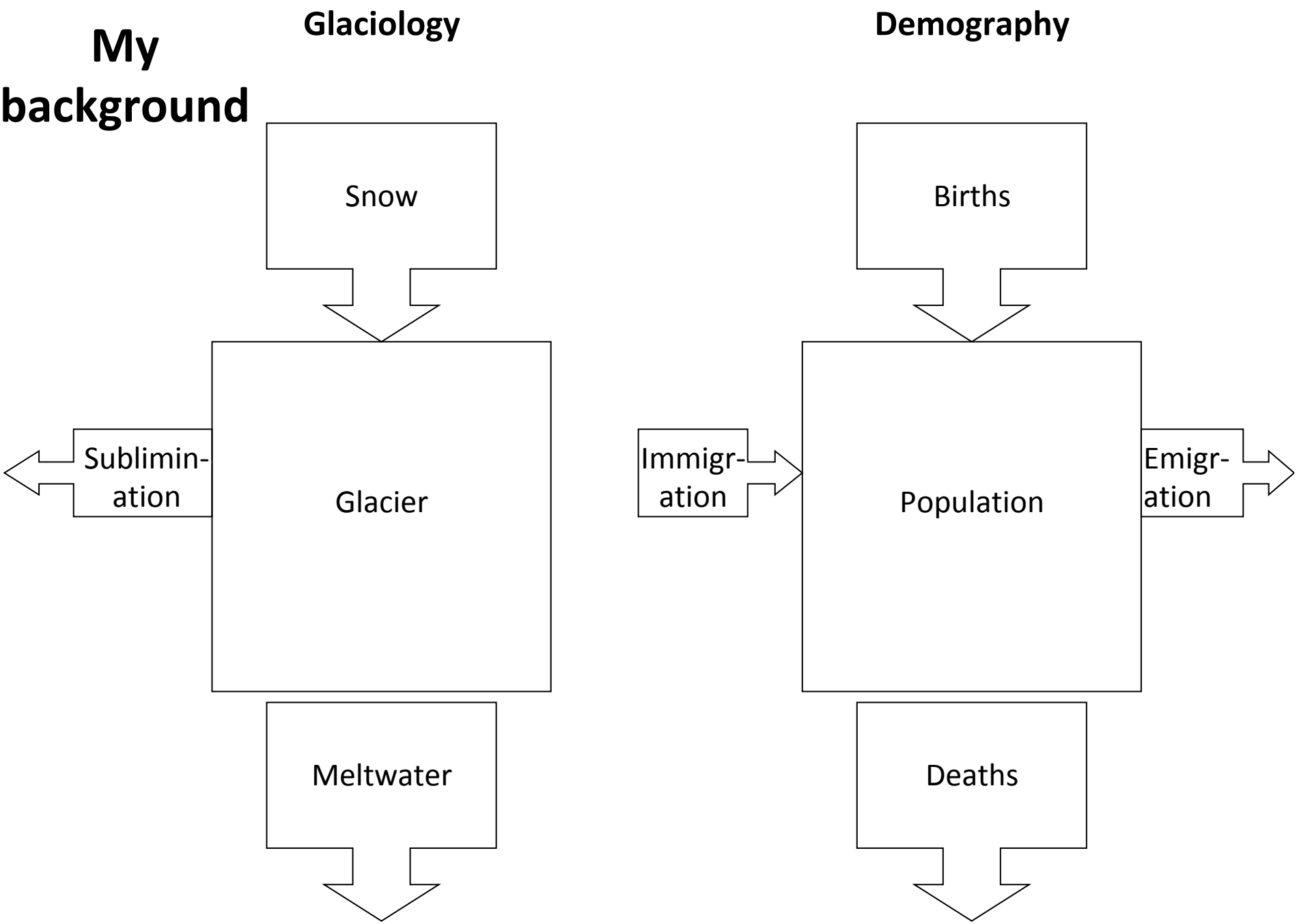
Trends in fertility, mortality, religiosity and life satisfaction: a snapshot of results and avenues for future research

Dr Marion Burkimsher

Affiliated to the University of Lausanne

My background



Common theme. . .

Geography:

Processes
Spatial variations
Temporal variations
Data analysis

Published papers

drmarionb.free.fr/Published papers

Or check out Google Scholar!

- Fertility data validation
- Trends in religious attendance
- Trends in fertility across Europe since 1990s
- How the fertility curve evolves over time
- Fertility of migrants compared to Swiss natives
- Why the TFR is a misleading indicator of migrant fertility
- Childlessness in Switzerland and its determinants
- Association of religiosity and fertility: country comparison
- Variations in childbearing patterns across Swiss cantons

> Research strands where I have got some interesting results;
have presented them at conferences;
but they've not been published in journals

Over to you to follow up!

> Presentation title as an 'appetiser' and 1 or 2 interesting results

> Please contact me so we could take the work further:
I'm moving to New Zealand; contact me by email

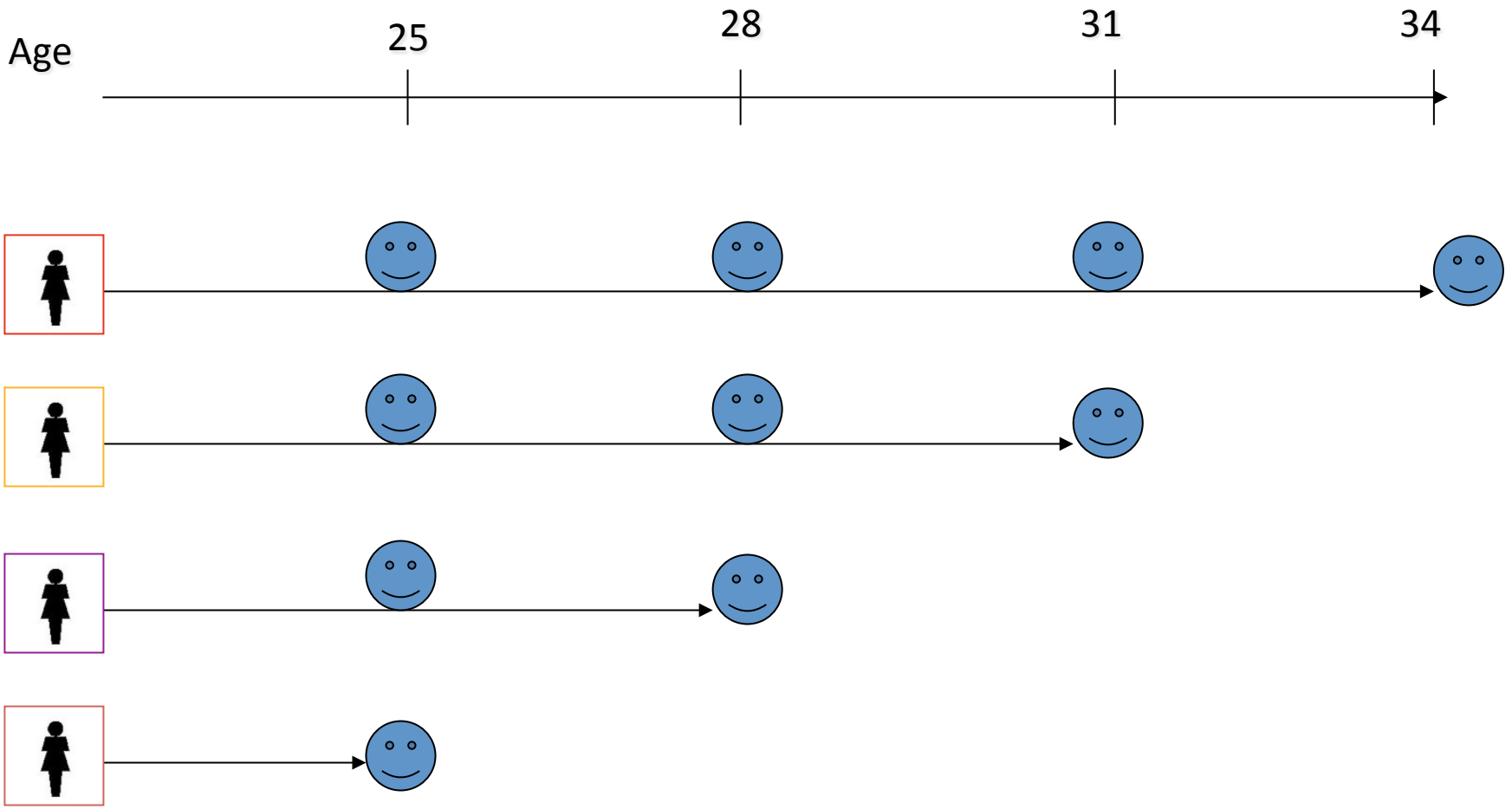
> Not going to talk about projects that I have in hand − don't want the ideas stolen − academia can be ruthless!

Will point to data resources: Swiss Statistical Office (published & unpublished); Human Fertility Database; Swiss Household Panel; Generations and Gender Surveys (GGS plus EFG for Switzerland); European Social Survey (ESS); European (World) Values Studies (EVS)

Fertility

"Spacing between children
and trends in mean age of successive birth orders:
quite different stories!”

Scenario 1: 4 women, having 1, 2, 3 and 4 children respectively

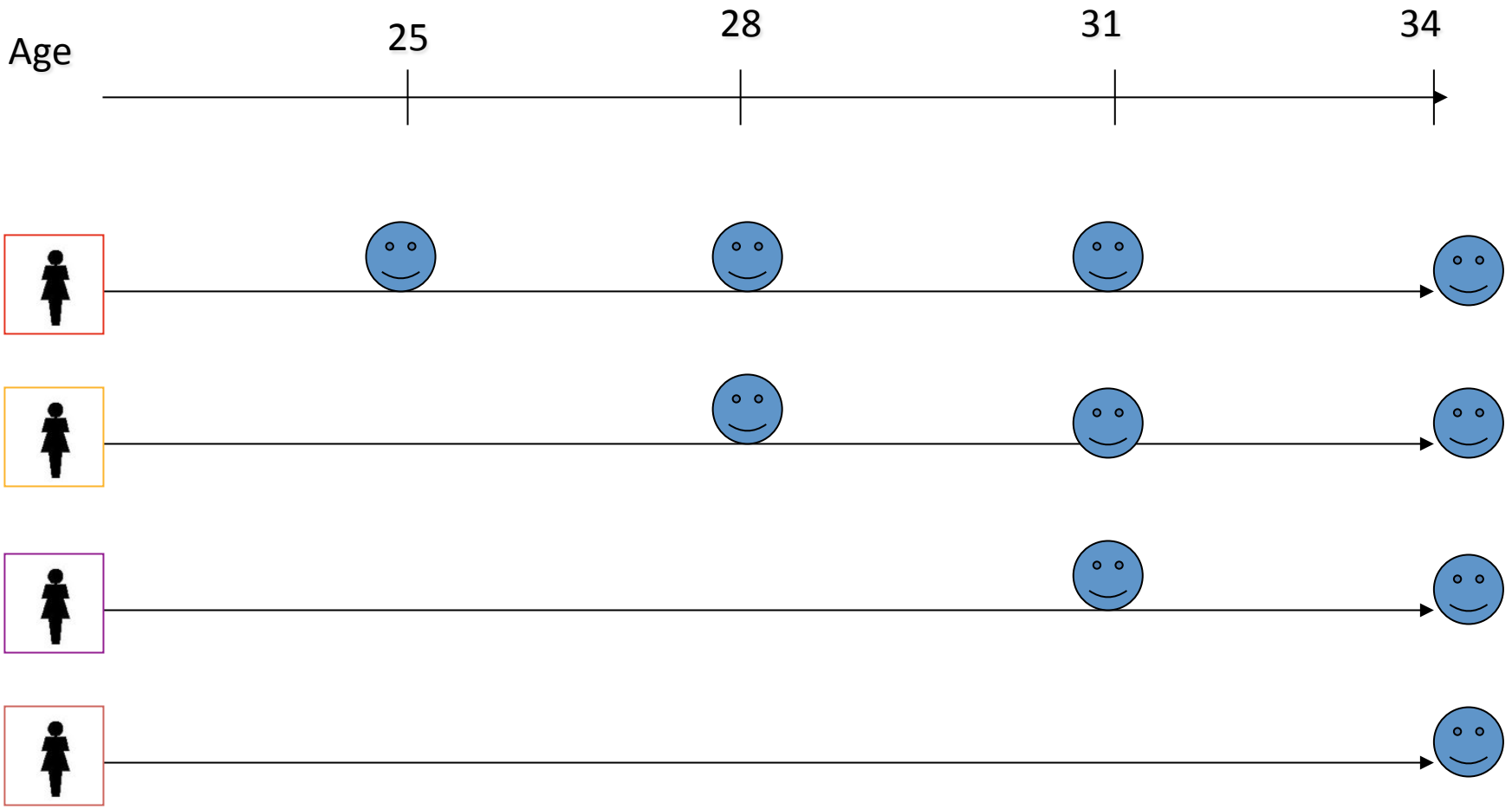


Mean age at 1st birth: 25 Std dev 0
Mean age at 2nd birth: 28 Std dev 0
Mean age at 3rd birth: 31 Std dev 0
Mean age at 4th birth: 34

Mean spacing between all birth orders: 3 years

Mean age at last birth: 29.5

Scenario 2: 4 women, having 1, 2, 3 and 4 children respectively



Mean age at 1st birth: 29.5 Std dev 3.9
Mean age at 2nd birth: 31 Std dev 3.0
Mean age at 3rd birth: 32.5 Std dev 2.1
Mean age at 4th birth: 34

Mean spacing between all birth orders: 3 years

Mean age at last birth: 34
Std dev last birth: 0

Fertility

"Who has more children than their mother?"

% women aged 40-60 who have had more children than their mother

	%	Number	Out of (valid responses)
Belgium	6.7	83	1231
Austria	9.8	64	653
Switzerland	10.8	342	3166
Georgia	11.8	249	2108
Bulgaria	12.5	262	2100
Germany	16.1	265	1644

Data GGS I; FGS for Switzerland (max. age 45 in Austria sample)

Factors that increase the likelihood of a country having a higher % of women having more children than their mother

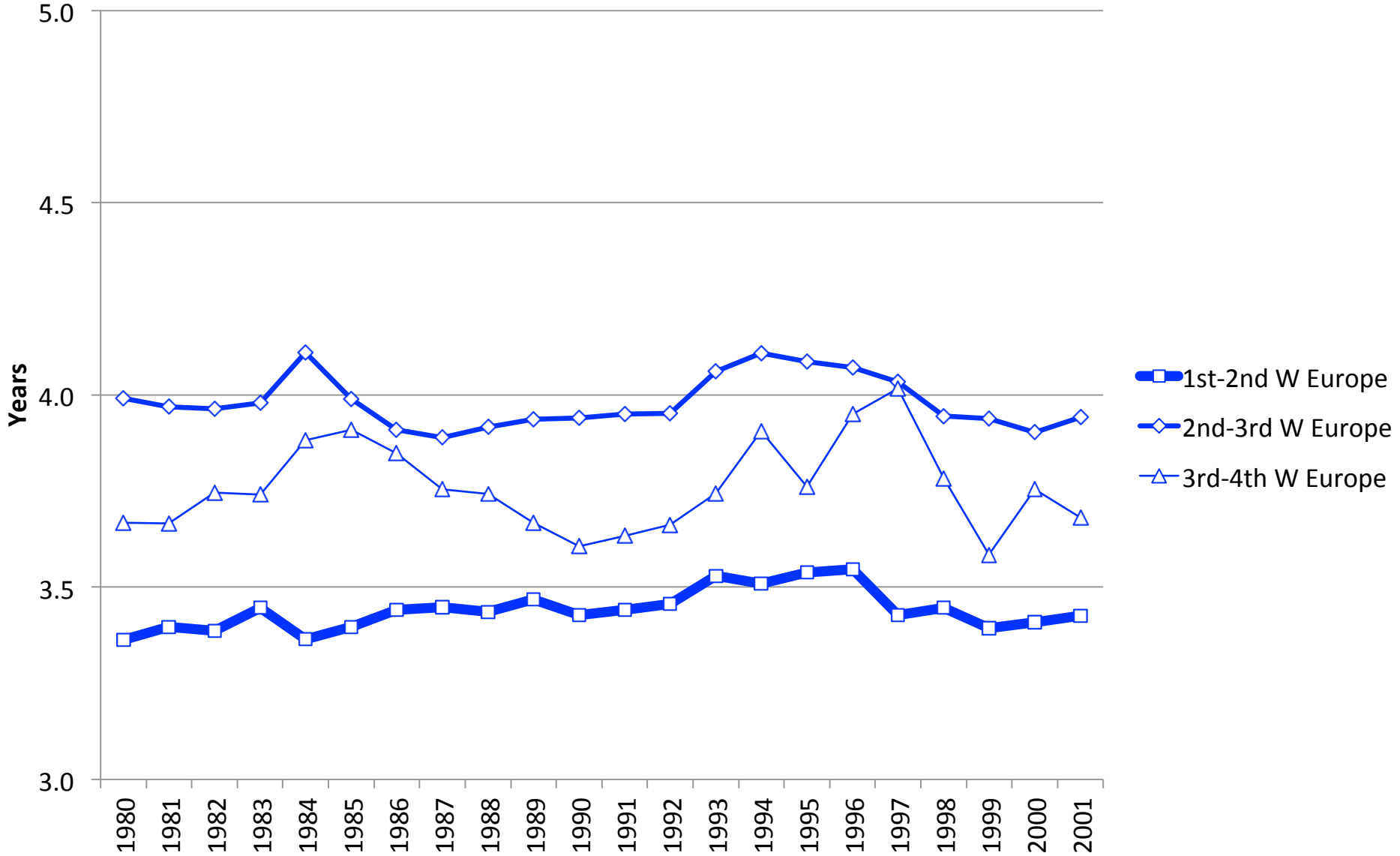
- Historically a small proportion of larger families
- Historically a larger proportion of one-child families
- A strong 2-child norm

Fertility

"Trends in birth intervals for twenty countries”

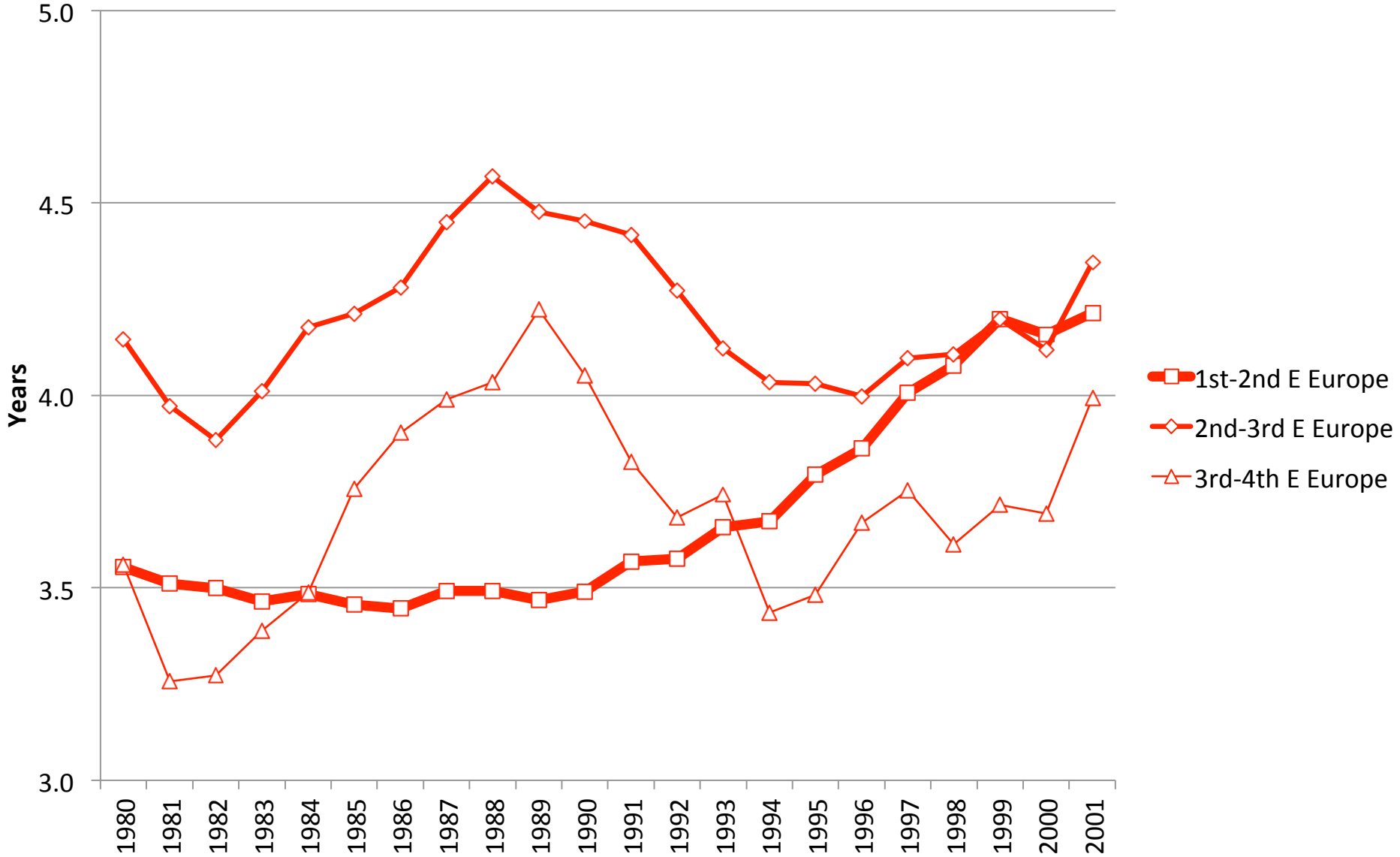
"Spacing of children in Switzerland: constancy or change?"

Average birth intervals 1st-2nd, 2nd-3rd and 3rd-4th Western Europe + USA



Data source: Harmonised Histories of GGS plus EFG for Switzerland

Average birth intervals 1st-2nd, 2nd-3rd and 3rd-4th Eastern Europe



Data source: Harmonised Histories of GGS

Fertility

"Expectations and reality of childbearing:
effect on partner relationship and finances”

"Comparing partnership satisfaction and financial situation
before and after having a first child:
how does reality match expectations?"

How did the actual changes tally with the expectations of change in relationship quality?

GGS I wave 2 compared to wave 1, same individuals, 3 years apart who had a child in between

	Lithuania	Russia	Hungary	Czechia	Bulgaria	Germany	Poland	France	Austria
Expected & actually worse	1%	2%	1%	0%	5%	3%	2%	1%	1%
Expected & actually same	16%	16%	23%	34%	14%	24%	27%	33%	37%
Expected & actually better	19%	20%	12%	11%	19%	7%	7%	6%	7%
Better than expected	16%	17%	18%	17%	11%	20%	13%	18%	8%
Worse than expected	46%	45%	46%	37%	51%	46%	51%	43%	47%

The reason for the high level of ‘worse than expected’ is that many respondents classified their relationship quality in Wave 1 as level 10 – so it couldn’t go up from there - so more likely to stay the same or go downhill….

How did the actual changes tally with the expectations of change in financial situation?

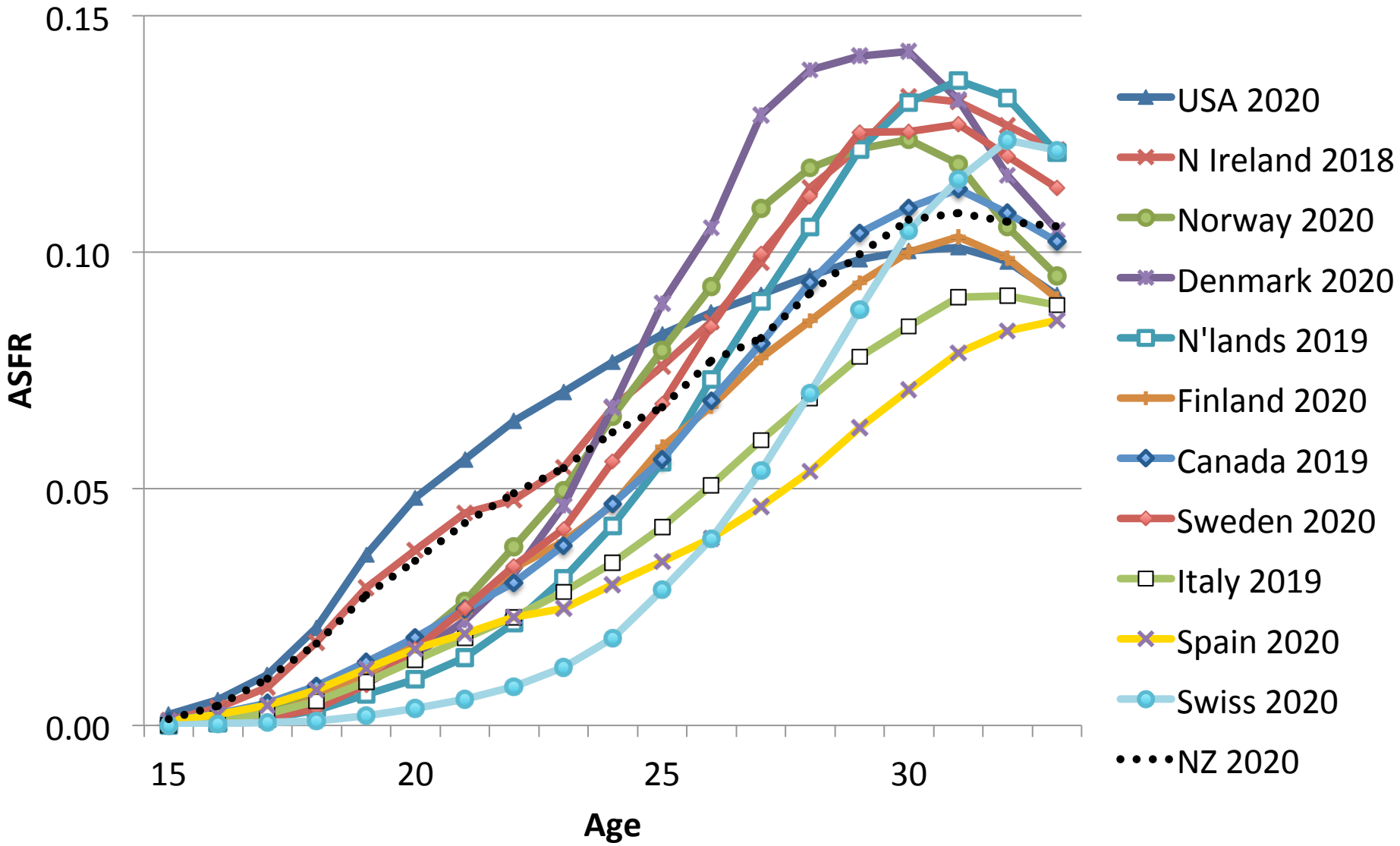
	Lithuania 2006-2009	Poland 2010-2014	Germany 2005-2008	France 2005-2008	Czechia 2005-2008	Austria 2008-2012	Russia 2004-2007	Bulgaria 2004-2007
Expected & actual worse	24%	23%	24%	12%	28%	20%	14%	15%
Expected & actual same	10%	9%	12%	22%	6%	16%	21%	13%
Expected & actual better	6%	0%	3%	2%	4%	1%	2%	1%
Better than expected	40%	54%	46%	38%	53%	49%	50%	61%
Worse than expected	20%	13%	14%	26%	9%	13%	14%	10%

Many people expect that having a child will have an adverse effect on their finances. But the outcome tends to be better than expected. For many couples there is little change.

Fertility

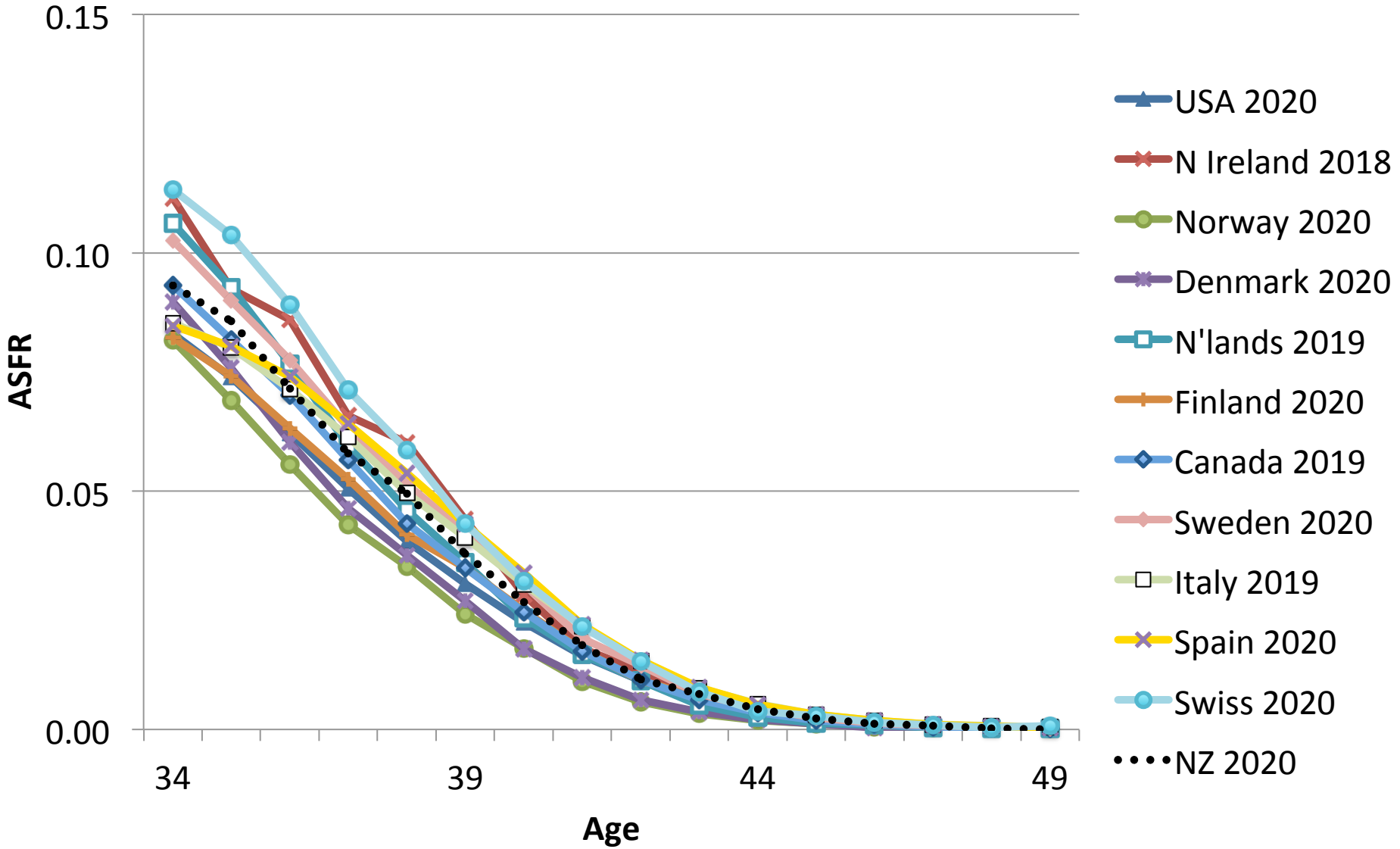
"Why has the TFR fallen in many western countries over the past decade?”

Fertility curves age 15-33, 2018/19/20



Data source: Human Fertility Database & NZ Stats

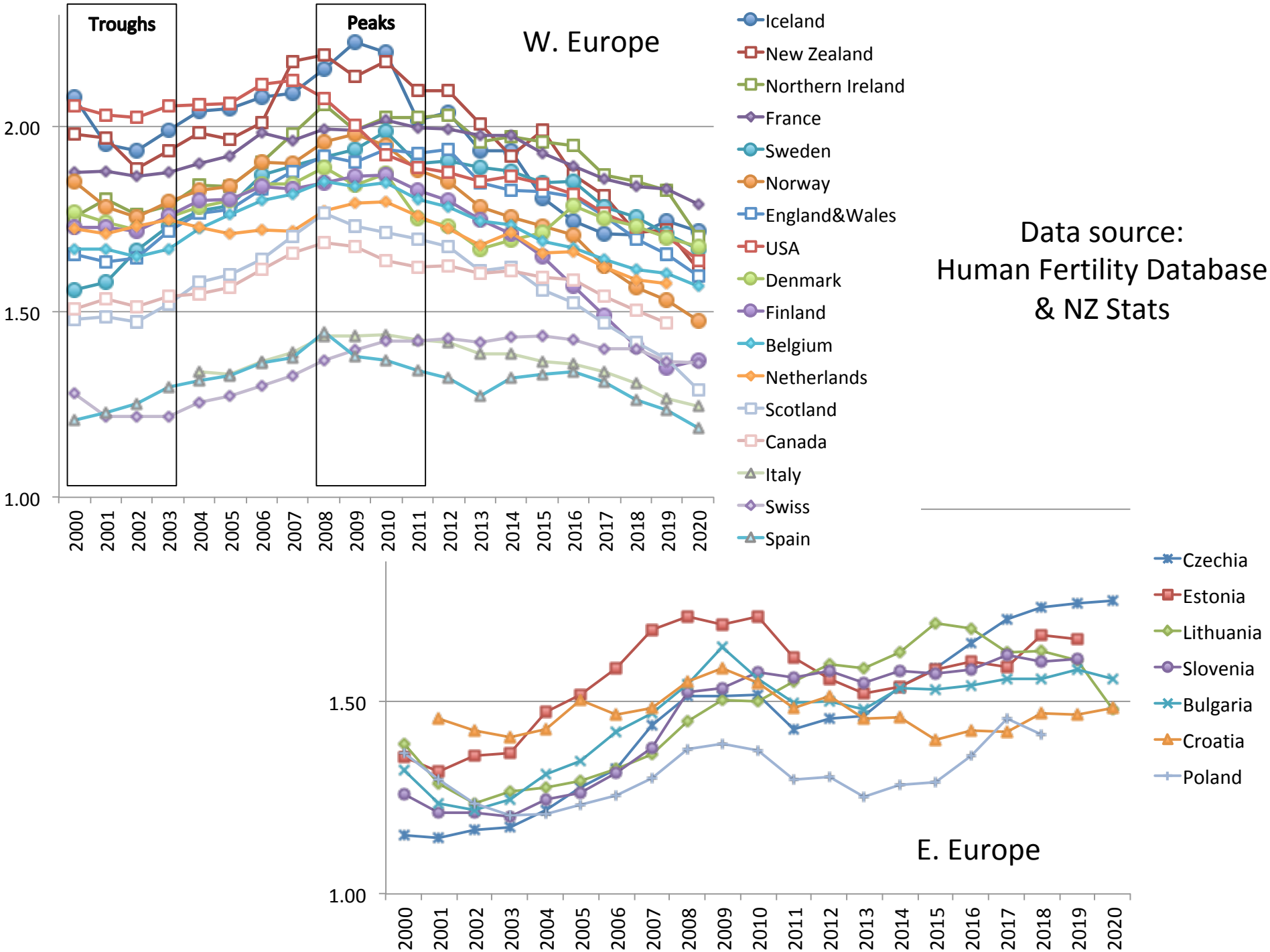
Fertility curves age 34-49, 2018/19/20



Data source: Human Fertility Database & NZ Stats

Fertility

Fertility Trends 2000-2020:
Similarities and differences
between Western and Eastern European Countries


Troughs
Peaks
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1.00
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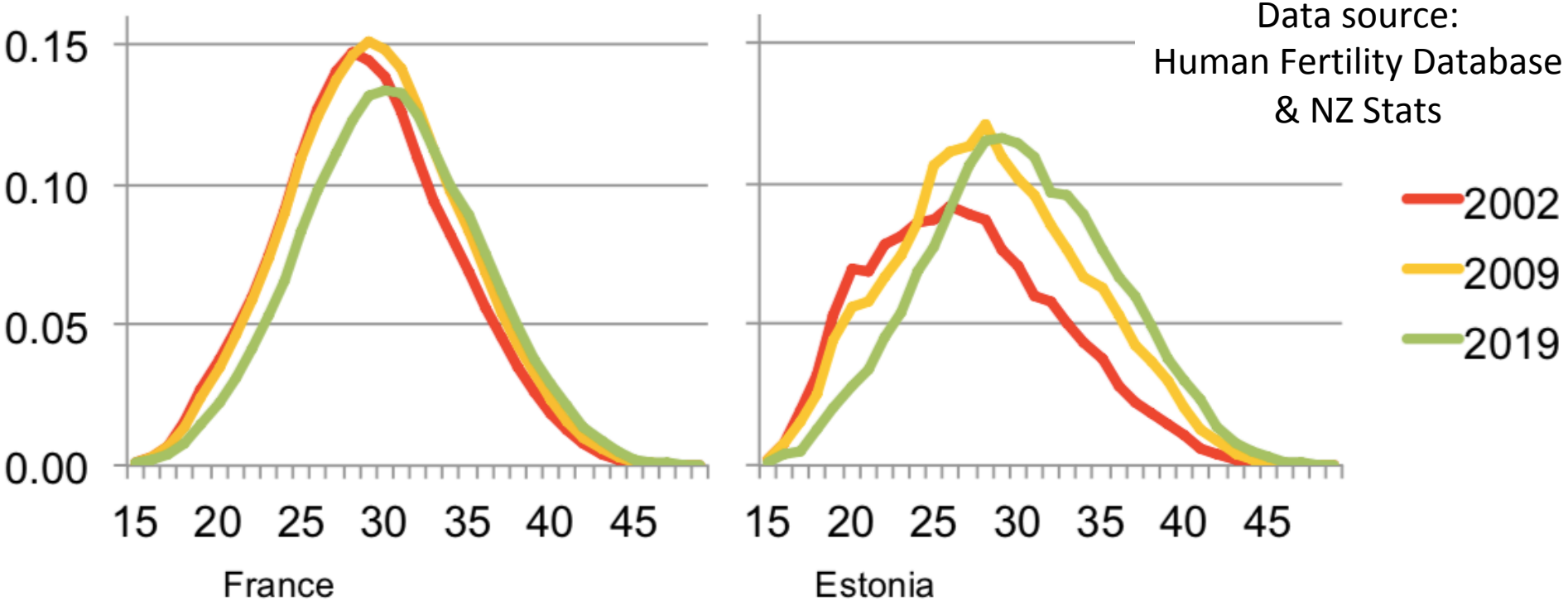
2020
Iceland
New Zealand
Northern Ireland
France
Sweden
Norway
England&Wales
USA
Denmark
Finland
Belgium
Netherlands
Scotland
Canada
Italy
Swiss
Spain
Data source:
Human Fertility Database
& NZ Stats
Czechia
Estonia
Lithuania
Slovenia
Bulgaria
Croatia
Poland
E. Europe



Explanations

TFRs rose after 2002 as early (pre-modal age) fertility stabilised and late fertility kept rising
TFRs have declined in the West since 2010 because early fertility has declined whilst late fertility has stabilised

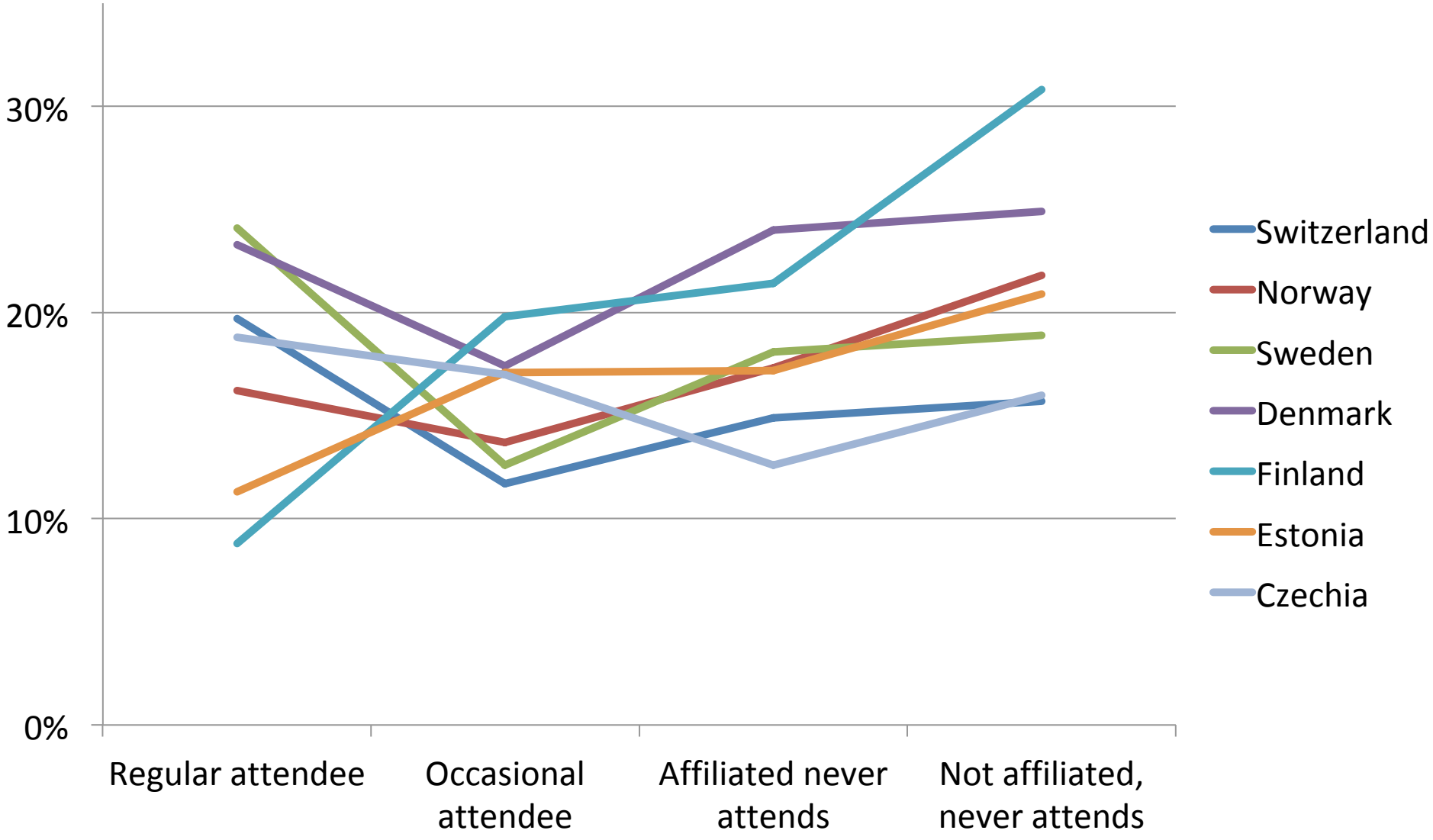
Childbearing is trending later across Europe
But it was much younger in the East than in the West
In the West late childbearing (over age 34) may be hitting a barrier: similar late fertility curves for all western countries
In the East there is still potential for an increase in post modal age fertility

Fertility & religiosity

"Association of religiosity with partner relationships"

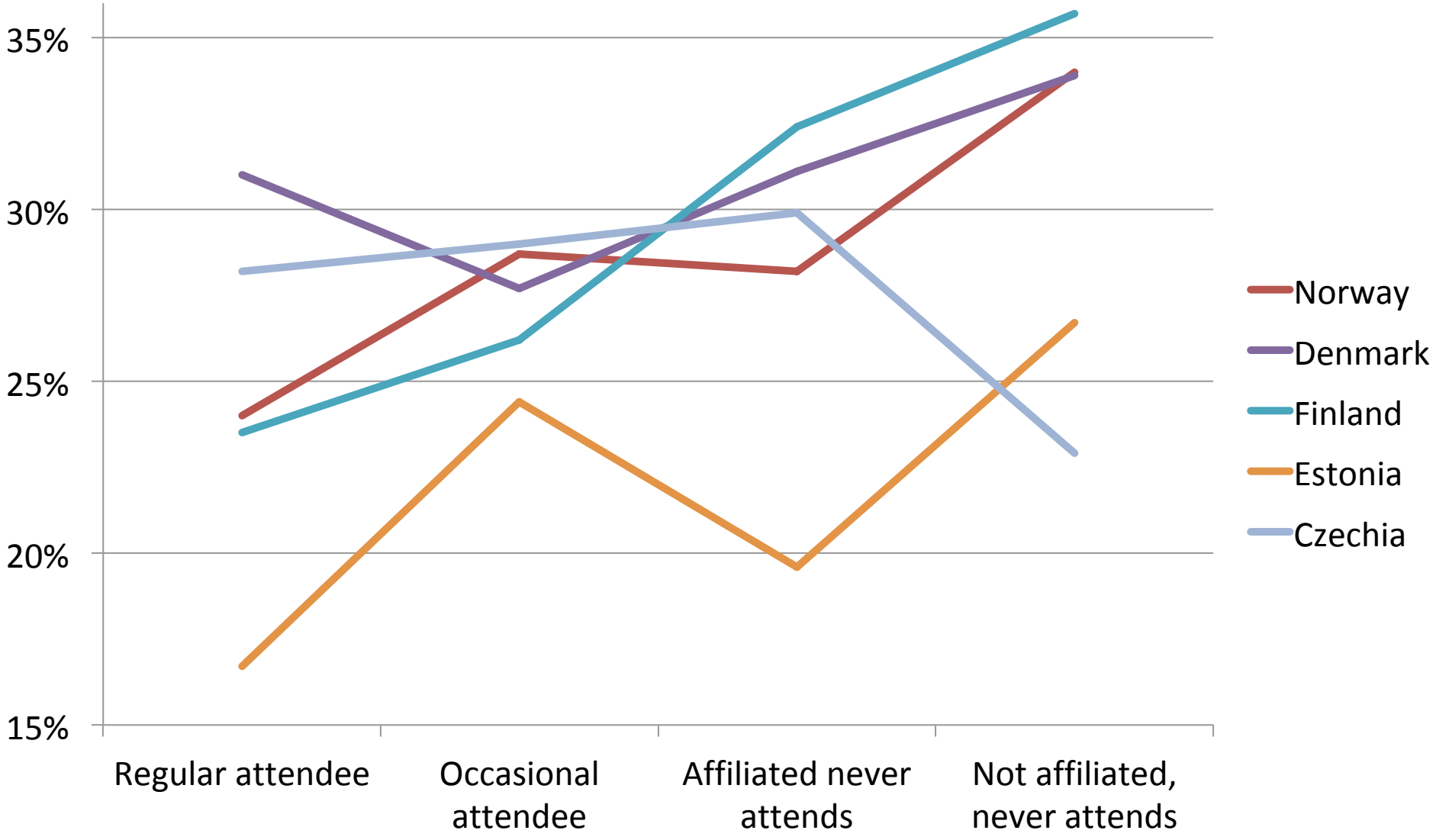
Proportion with no current partner (M&W aged 30-41)

Data source: GGS II and EFG Switzerland



Proportion no sex in previous 4 weeks
(question not asked in Sweden or Switzerland)

Data source: GGS II

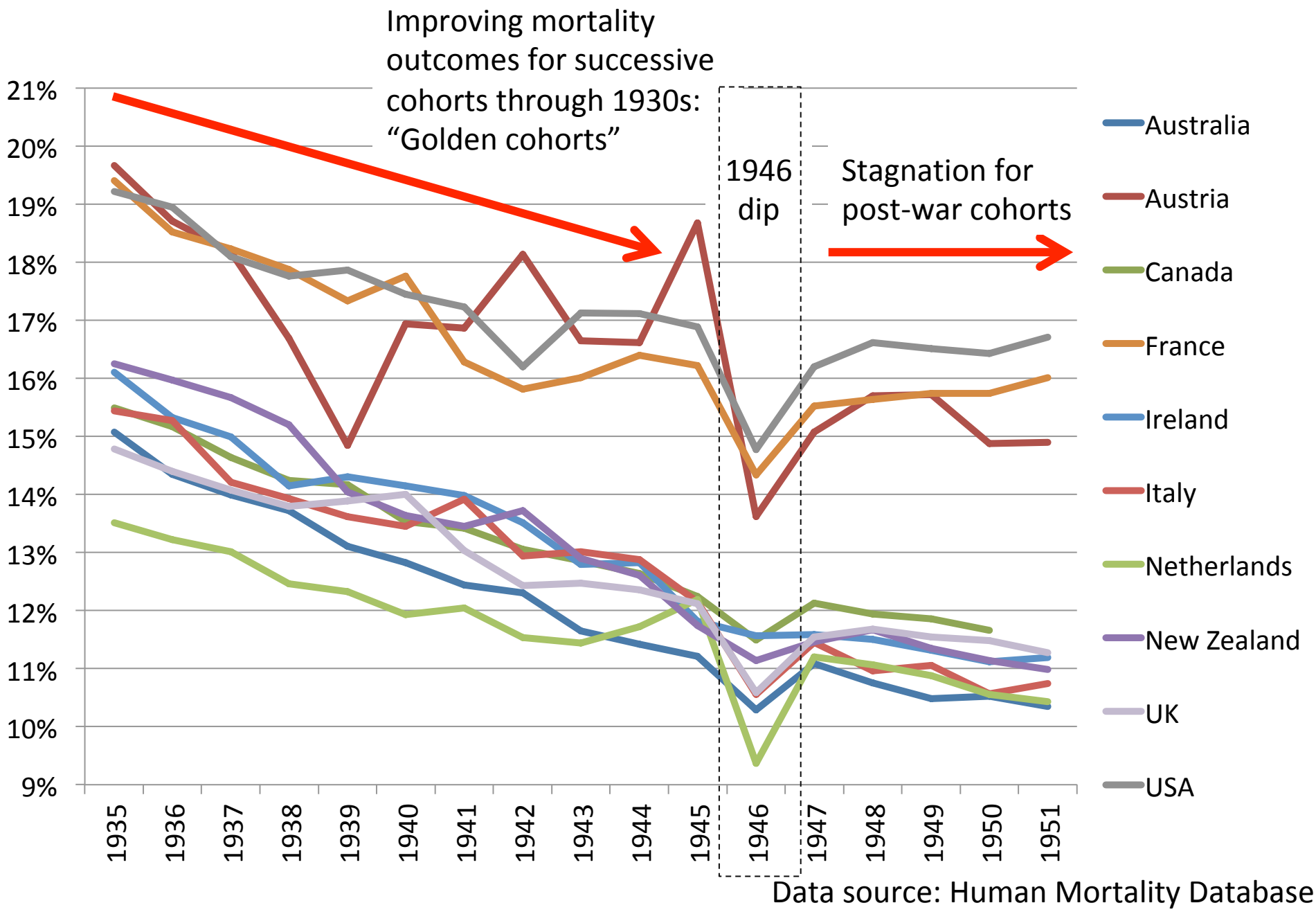


Mortality

"After the mortality improvements of the Golden Cohort,
how has the Baby Boom generation fared?
Good news and bad news"

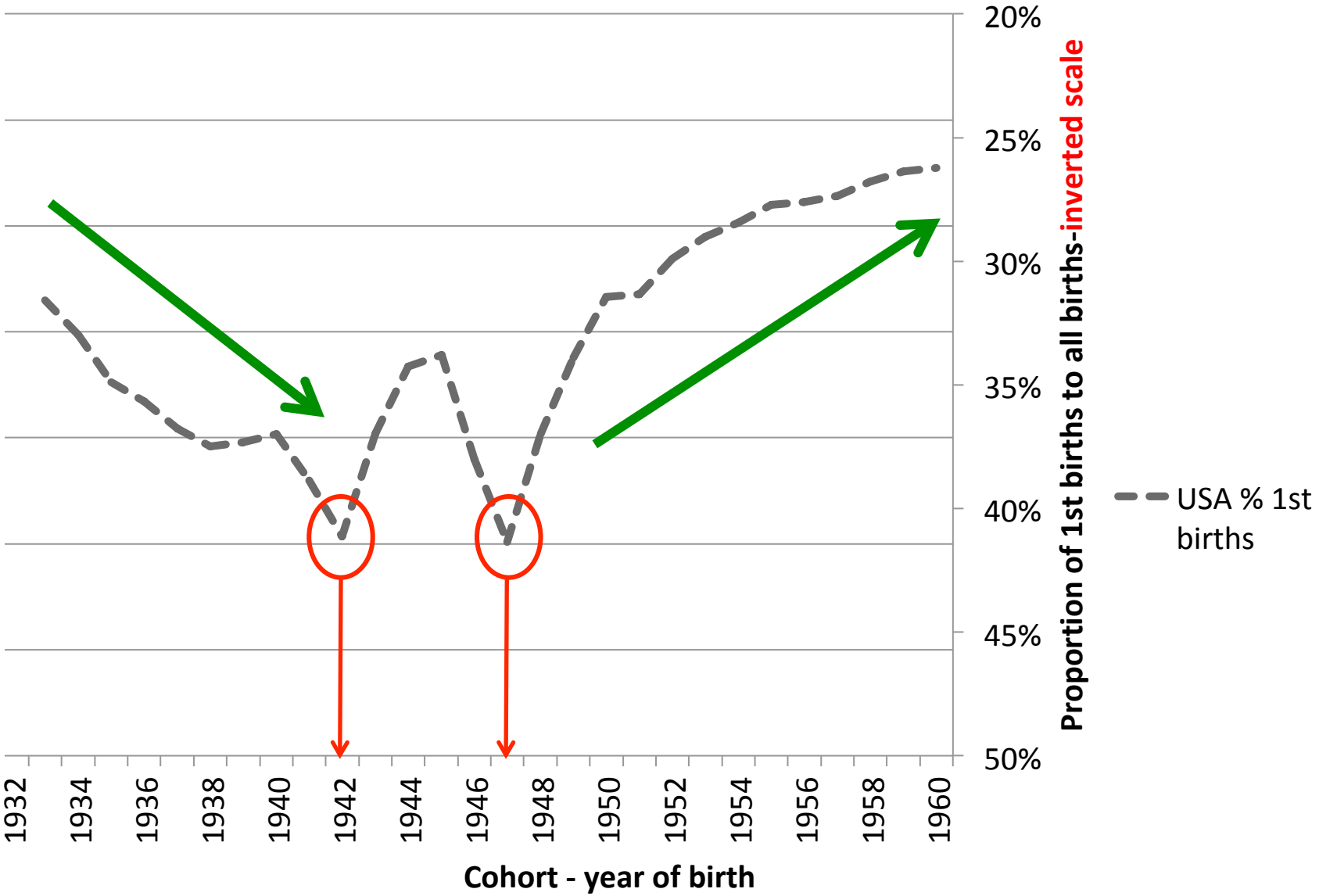
"Cohort mortality: what is so special about the people born in 1946?"

Likelihood of dying between ages 15-60 - males



Data source: Human Mortality Database

Trend in proportion of % 1st births to all births, USA, 1932-1960



Data source: Human Fertility Database

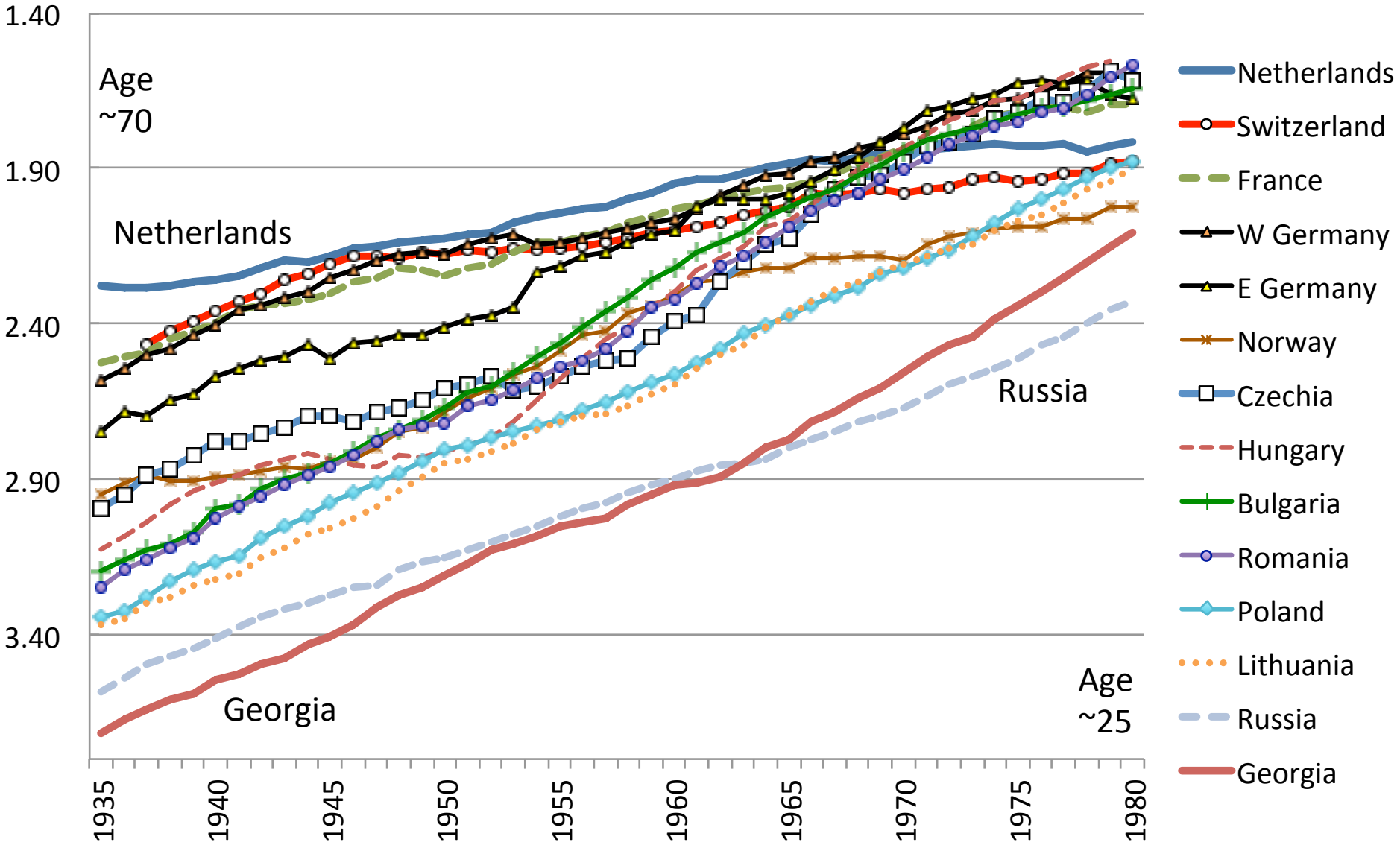
Health

"Differentials in self-assessed health by generation: cross-country comparisons"

Female: self-reported health by cohort

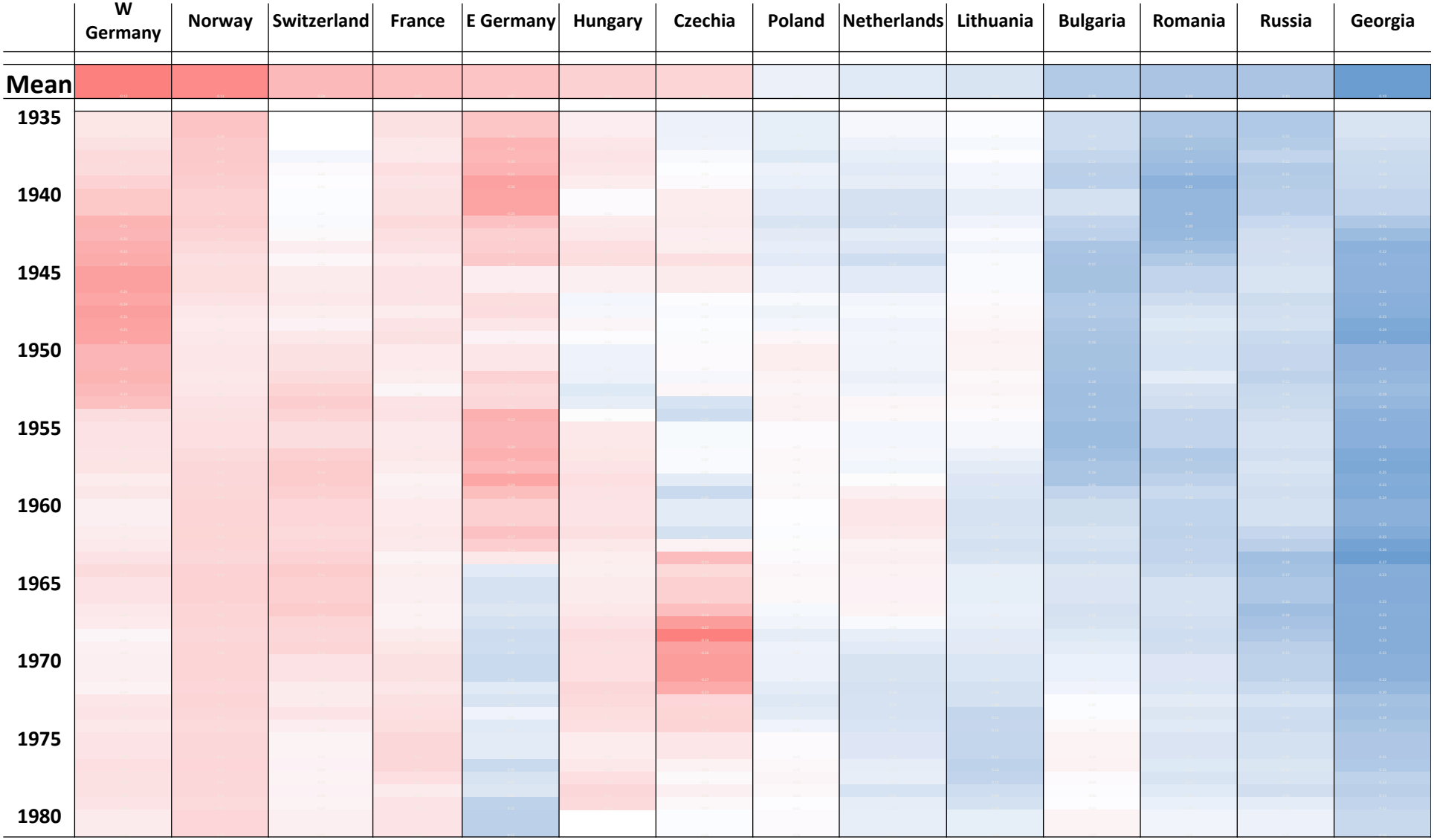
1=very good 5=very poor, inverted scale, 5 year rolling averages

Data source: GGS I, EFG for Switzerland



Difference in health score males – females by cohort

Pink = women have worse health Blue = men have worse health



=> In West European countries, women tend to have worse health; in Eastern Europe it's men

=> East Germany and Czechia have interesting cohort differentials

Religiosity

"If people become more religious, do they become happier?"

Who becomes happier?

Who becomes sadder?

Differentiated by age group

- **Teens, 20s, 40s, 50s, 60s more like to become happier if start attending more**
- **Teens, 20s, 30s, 50s, 60s more likely to become sadder if attend less**
- **Anomalies: 50s, 70s start attending>sadder; 20s, 40s always regular**

Data source: Swiss Household Panel 1999-2012

		Change year1-year2
13-19	Always regular	-0.47
	Always occasional	-0.46
	Always rare	-0.25
	Stopped regular	-0.23
	Occasional>rare	-0.51
	Rare>occasional	-0.08
	Became regular	-0.44
20s	Always regular	-0.48
	Always occasional	-0.20
	Always rare	-0.15
	Stopped regular	-0.46
	Occasional>rare	-0.12
	Rare>occasional	-0.21
	Became regular	0.04
30s	Always regular	-0.15
	Always occasional	-0.21
	Always rare	-0.14
	Stopped regular	-0.34
	Occasional>rare	-0.19
	Rare>occasional	-0.19
	Became regular	-0.17
40s	Always regular	-0.16
	Always occasional	-0.11
	Always rare	-0.15
	Stopped regular	-0.15
	Occasional>rare	-0.14
	Rare>occasional	-0.12
	Became regular	-0.08
50s	Always regular	-0.08
	Always occasional	-0.09
	Always rare	-0.04
	Stopped regular	-0.07
	Occasional>rare	-0.18
	Rare>occasional	0.04
	Became regular	-0.18
60s	Always regular	-0.24
	Always occasional	-0.17
	Always rare	-0.13
	Stopped regular	-0.08
	Occasional>rare	-0.31
	Rare>occasional	-0.22
	Became regular	0.02
70s	Always regular	-0.13
	Always occasional	0.01
	Always rare	-0.34
	Stopped regular	-0.40
	Occasional>rare	-0.30
	Rare>occasional	-0.22
	Became regular	-0.55

Religiosity

"Is there any evidence of “fruits of the spirit”
amongst practising Christians
compared to the non-religious?"

Religiosity

Data source: GGS I

Practising Christians were significantly more likely than the non-religious to be happy (in 8 out of 12 countries in their job; 11/12 re home; 6/11 re partner).

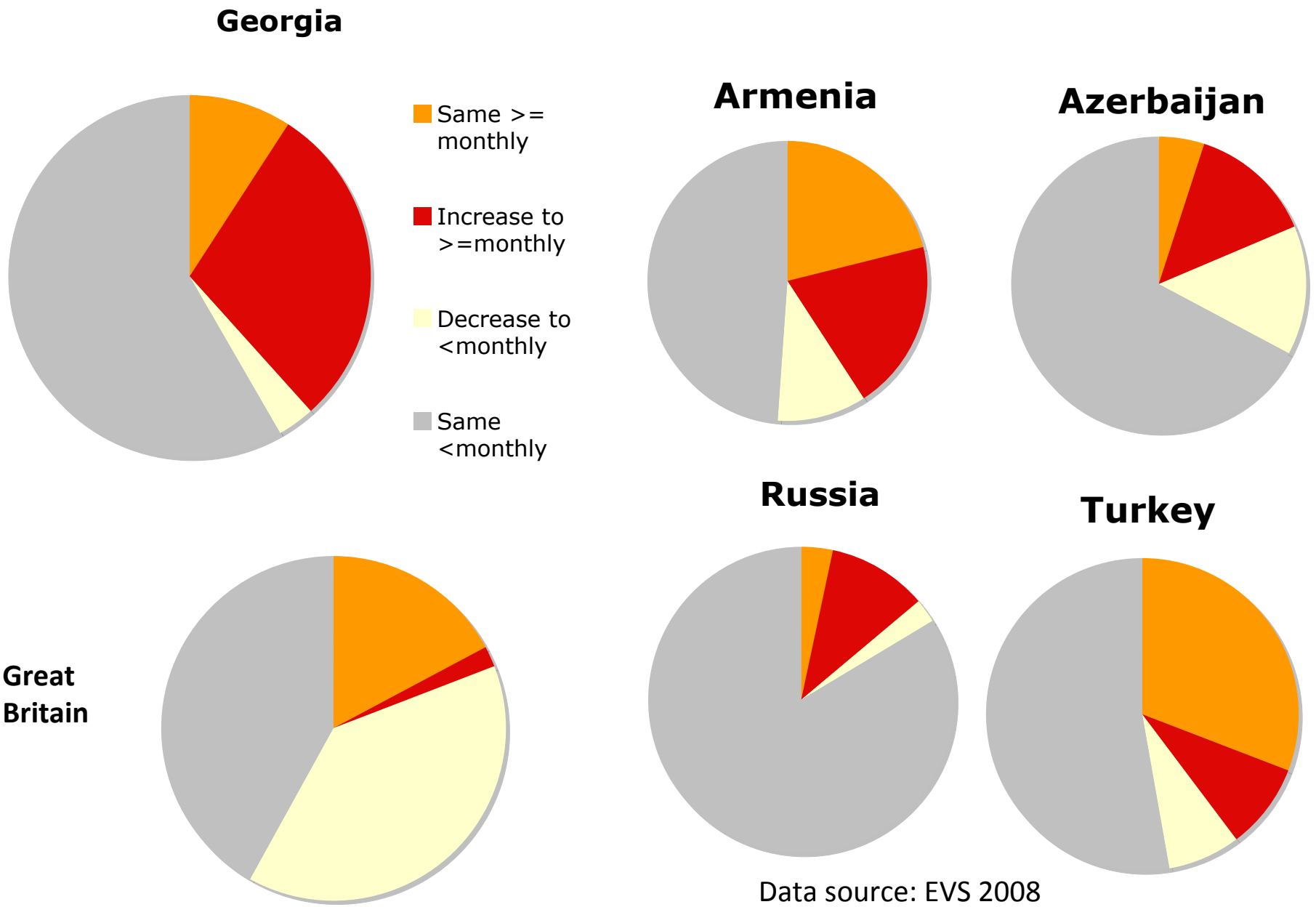
They were more likely to trust other people (6/9 countries);
be caring for someone outside the home (7/12 countries);
and less likely to quarrel with their partner (4/9).

Across all variables there were no countries in which practising Christians were “worse” than the non-religious.

Religiosity

"Dissection of a religious revival: a case study of Georgia"

Change in frequency of religious attendance between age 12 and time of survey



Data source: EVS 2008

Happiness

"Cross-country variations in happiness:
trends, age differentials and anomalies"

Happiness at each wave, ages 18-69, biggest movers

Data source: European Social Survey 2002-2014

Rank each year	2002	Mean happiness score	2004	Mean happiness score	2006	Mean happiness score	2008	Mean happiness score	2010	Mean happiness score	2012	Mean happiness score	2014	Mean happiness score
1	Denmark	8.32	Denmark	8.28	Denmark	8.33	Denmark	8.37	Denmark	8.23	Denmark	8.35	Denmark	8.18
2	Switzerland	8.06	Switzerland	8.09	Switzerland	8.09	Finland	8.04	Switzerland	8.07	Norway	8.12	Switzerland	8.07
3	Finland	8.00	Finland	8.05	Finland	8.01	Norway	7.96	Norway	8.00	Switzerland	8.11	Finland	8.06
4	Norway	7.87	Ireland	7.94	Norway	7.92	Switzerland	7.93	Finland	7.95	Finland	8.10	Norway	7.94
5	Sweden	7.87	Norway	7.90	Sweden	7.90	Sweden	7.80	Sweden	7.87	Netherlands	7.93	Sweden	7.89
6	Netherlands	7.86	Sweden	7.84	Netherlands	7.70	Netherlands	7.80	Netherlands	7.85	Sweden	7.81	Netherlands	7.86
7	Ireland	7.86	Netherlands	7.78	Spain	7.69	Spain	7.76	Belgium	7.81	Belgium	7.69	Belgium	7.74
8	Belgium	7.75	Belgium	7.73	Ireland	7.67	Belgium	7.63	Spain	7.62	Germany	7.67	Germany	7.65
9	United Kingdom	7.55	Spain	7.45	Belgium	7.64	Ireland	7.48	United Kingdom	7.43	Spain	7.54	United Kingdom	7.51
10	Spain	7.49	United Kingdom	7.39	United Kingdom	7.49	United Kingdom	7.47	Germany	7.42	United Kingdom	7.44	Spain	7.46
11	France	7.49	France	7.36	Slovenia	7.30	Slovenia	7.28	Poland	7.33	Poland	7.31	France	7.39
12	Germany	7.24	Slovenia	7.30	France	7.24	Germany	7.25	Slovenia	7.31	Slovenia	7.29	Poland	7.33
13	Portugal	7.04	Germany	7.15	Germany	7.10	Poland	7.25	France	7.14	France	7.26	Ireland	7.26
14	Czech Republic	7.00	Czech Republic	7.01	Poland	6.96	France	7.23	Estonia	6.95	Ireland	7.07	Slovenia	7.13
15	Slovenia	6.97	Poland	6.81	Estonia	6.82	Czech Republic	6.93	Ireland	6.92	Estonia	6.91	Estonia	7.05
16	Poland	6.37	Portugal	6.65	Portugal	6.66	Portugal	6.78	Portugal	6.81	Czech Republic	6.77	Czech Republic	6.96
17	Hungary	6.33	Hungary	6.51	Hungary	6.45	Estonia	6.75	Czech Republic	6.70	Portugal	6.57	Portugal	6.92
18			Estonia	6.38			Hungary	6.00	Hungary	6.47	Hungary	6.14	Hungary	6.51

Conclusions

- Stability!
- Recession hit happiness levels in some countries much harder than others
- Young happier than old in general
- Generations more equal in happiness level the higher their GDP/pp
- Young generation more similar in happiness across Europe than older generations
- Happiness closely related to GDP/pp, especially for older people
- Baby Boomers are becoming happier as they age

Please contact me!

drmarionb@gmail.com

Go to website
drmarionb.free.fr/resume

And find me on ResearchGate: Marion Burkimsher

Thank you!