

Economic recession, family change and fertility in Europe

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FERTILITY AND REPRODUCTION
IN 21ST CENTURY EUROPE



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CHANGING PATHWAYS TO PARENTHOOD

Long-term shifts prior to the recession

- Expanded university education, late completion of education (2012: Fin: age 29 1st degree, 32 2nd+ degree; OECD 2014)
- Women “overtaking” men in education attainment, “catching up” with men in employment
- **Partnerships:** Longer partner search, more instability, changing education pairing (+ reliable contraception)
- Higher tolerance of **voluntary “childfree” lifestyle**
- Rising **labour market uncertainty**, high youth unemployment, unstable jobs (especially for lower-educated & in Southern Europe)

CHANGING PATHWAYS TO PARENTHOOD

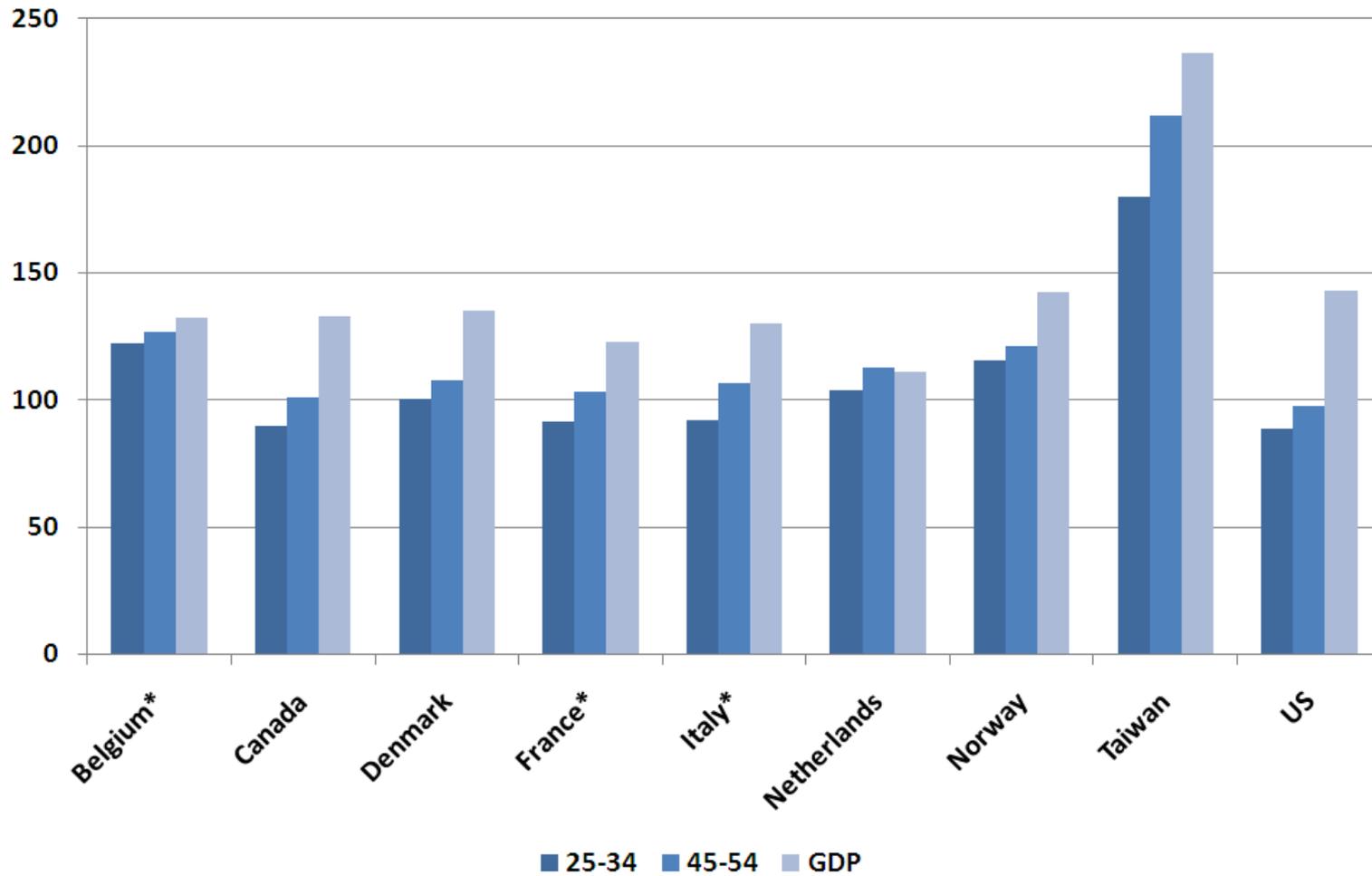
Mills & Blossfeld (2004): young adults 'losers' of globalisation process

Vanhuyse (2013) *and others*: social spending unequally distributed, “pro-elderly bias”; rise of “gerontocracy” (Berry 2012)

- In 2007-8 Poland had the largest pro-elderly bias in public spending in OECD countries, ahead of Italy, Greece, Slovakia, and Japan (the index reached 8.6 in PL)

→ *Delayed family formation, in some countries delayed independence, (very) extended stay in parental home (Southern Europe, CEE)*

Change in real wages and GDP per worker in 1980s – early 2000s [rescaled to 100 – in 1980s]



Source: Skirbekk-Stonawski-Sanderson (2010): *No country for young men*. Computations based on Luxembourg Income Study

COMMON PRECONDITIONS FOR PARENTHOOD in contemporary Europe

- Completing education
- Achieving relatively stable employment (often important for parental leave & childcare arrangements)
- Accumulating resources (income, wealth, car ownership, housing)
- (Home or flat ownership: especially Southern Europe)
- Having a stable partner
- Feeling ready for parenthood

➤ Not only support for families, but also living conditions and choices of young adults in pre-family stage matter

Is economic recession „bad“ for partnerships and childbearing?



Conventional wisdom: Birth rates decline during economic downturn;
postponement

- Australian minister of employment in 2002: “*Children are the ultimate vote of confidence in the future*”

Agenda

- *Do economic recessions lead to shrinking families, falling birth rates?*
- *If so, how strong and universal is this effect?*
- *What are the factors / pathways how the recessions influence fertility?*

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Topics covered

- The effects of economic recessions on families and fertility rates
- Recent “Great recession”: European contrasts
- First marriage trends in Europe during the recent recession
- Family formation and fertility during the recent recession
- Discussion

Focus

- Rich countries, mostly in Europe
- Empirical data & brief literature review
- Aggregate-level trends, relationships and correlations

Partly based on

T Sobotka, V Skirbekk & D Philipov. 2011. Economic recession and fertility in the developed world. *Population and Development Review* 37(2)

The effects of economic recessions on families and fertility rates

ECONOMIC UNCERTAINTY AND FAMILY

Multiple effects of employment uncertainty: part-time jobs, unemployment, time-limited contracts, self-employment, downward mobility, income loss

Most theories suggest **pro-cyclical correlation** between economic growth, marriage and fertility

- **Adam Smith** (*The Wealth of Nations*, 1776): Economic development conducive to “multiplication of the species”
- **G. Becker** (1960): the demand for “durable goods” (incl. children) increases with income and declines with their “price”
- **Mills & Blossfeld** (2005): Uncertainty, economic precariousness and insecurity make long-term commitments difficult → postponement

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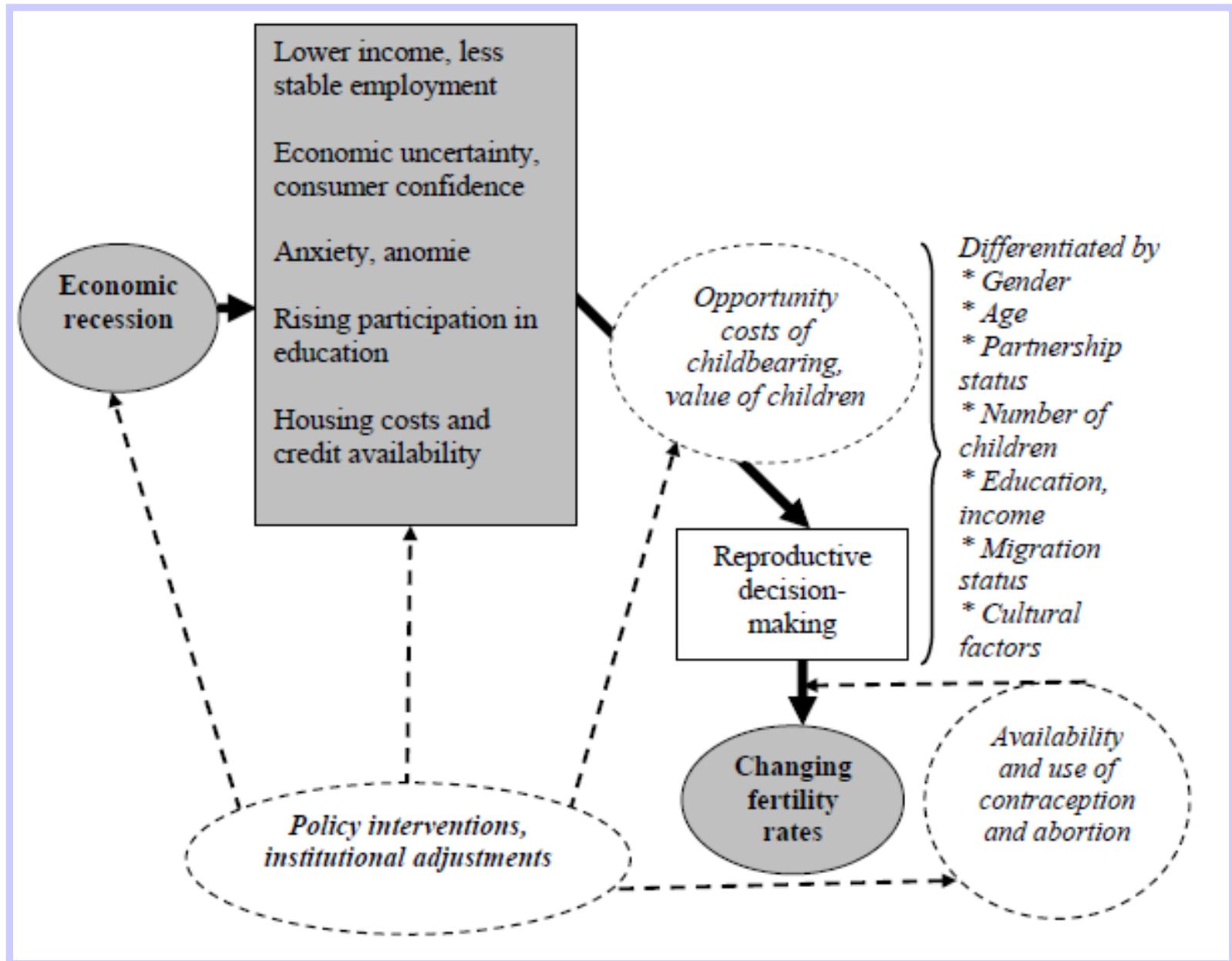
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Counter-cyclical arguments

- Butz and Ward (1979): Prosperous times “too expensive” for childbearing
- Friedman et al (1994): *Uncertainty reduction theory*

CRISIS and FERTILITY: Pathways & mechanisms



Recession, marriage and fertility: Historical evidence

Negative relationship between economic trends, birth rates and marriage rates (Yule 1906, Lee 1990, van Bavel 2001, Bengtsson et al. 2004)

Rindfuss et al. (1988): “Fertility decline in the West is a time-honored, normatively approved response to harsh economic conditions”

Recession, marriage and fertility: Historical evidence

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The Great Depression:

- Fertility reached record-low levels in the 1930s
- **US:** correlation between economic trends and total births and marriages (Galbraith and Thomas 1941, Becker 1960, Ryder 1980)
- **But:** no clear correlation between GDP decline and fertility trends in 11 Western countries (van Bavel 2007)

Recession, marriage and fertility: Historical evidence

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The oil shocks in the 1970s

- Falling fertility rates typically well before the recession started
- **Other factors more important?** Adoption of the pill & “pill scares” (Murphy 1992), abortion legalization, female ‘liberation’, value changes

Rising unemployment and fertility declines

- More 'direct' influence than the GDP; also signals and 'impressions' about how things likely to develop (Hoem 2000)
- Importance of aggregate unemployment trends even after controlling for individual employment status

De Cooman et al. (1987): different reaction to unemployment at different ages and parities

Kravdal 2002 (Norway): Both individual and aggregate effects during the recession around 1993. Aggregate abs. effect of rising unemployment on the TFR = -0.08 (F 2 to 4%, M 2 to 6%)

Finland: **Important exception** – rising second and higher-order births during the deep recession in 1992-94 linked to home-care allowance for parents (Vikat 2002 and 2004) -> *unintended effect of policies*

Individual-level evidence: Varied effects by age, gender, number of kids, social status

Strong effect on first births and partnership formation

- Especially M have difficulties to find a partner when unemployed

Men: Strong negative effect (e.g., Mills et al. 2005)

- Oppenheimer 1994: loss of men's income key factor in couples' childbearing decisions (*male breadwinner model still at work!*)

Women: no systematic effect, being out of the labour force

- Long-term effects usually negative also for F (Adsera 2005)

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Social status differences

Higher-educated F: *Postponement strategy*, especially when childless

- Opportunity costs of childbearing, labour market competition

Low-educated F: *Work withdrawal strategy* when cash benefits for childcare available

- Kreyenfeld (2009): positive effect unemp., ec. worries on 1st births

Recent “Great Recession”: European contrasts

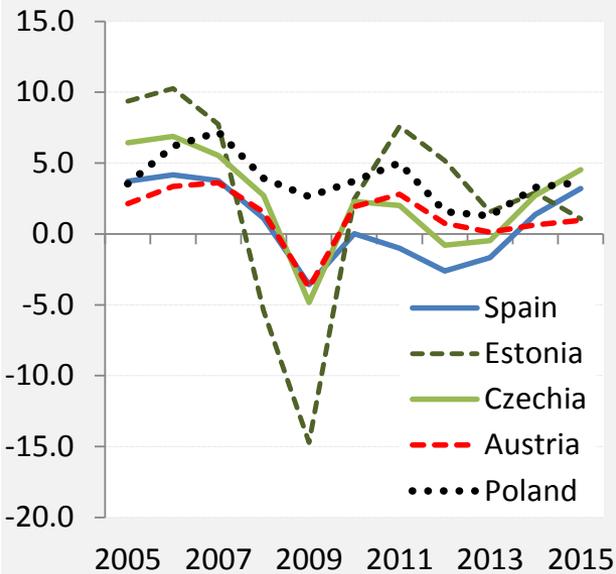
Why and how is the recent recession likely to have affected family and fertility?

- Massive unemployment in some countries
- Strong effect on young adults, further exacerbates the previous trend of their rising economic and employment uncertainty
- Rise in the share of NEETS & workless households
- Falling incomes, rise in negative equity on housing (mortgages “under water”), foreclosures (US)
- Austerity measures, cuts in government spending for families and young adults (*double-dip effect on fertility?*)
- Prolonged duration of the recession; loss of hope in the future (Southern Europe)

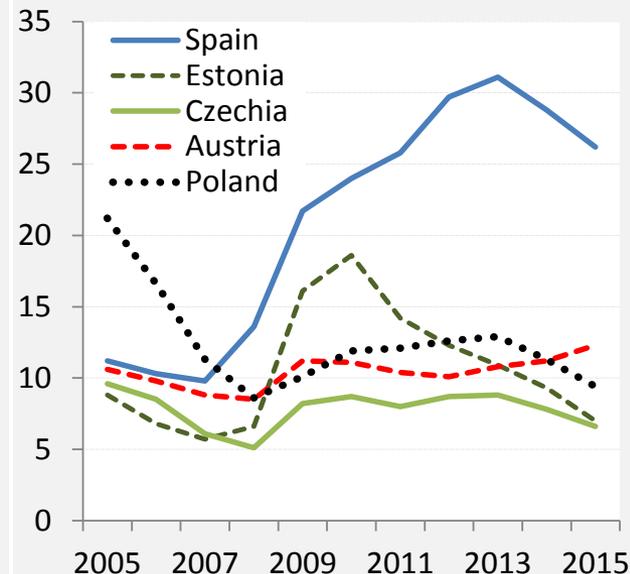
A new context of family decisions:

- Effective contraception, access to abortion, the “morning after” pill
- Late parenthood: less flexibility in further postponing childbearing

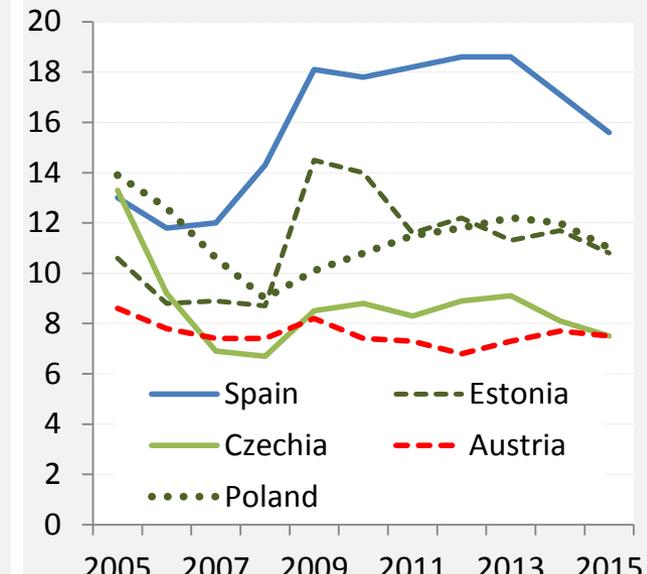
Key recession indicators: cross-country diversity



Annual GDP growth, %



Unemployment rate, ages 15-39, %



Share of young people not in employment, education, training (NEETs), age 15-24

Which countries most affected?

Multiple effects of the recession

	GDP (<-3%)	UNEMPL. (>+5%)	EMPLOYMENT (<-3% or more)	HH INCOME (<-3%)	NEETS young (>15%)	WORKLESS H (>2%)	Buying FOOD (>+3%)	TOTAL SCORE
Greece	x	x	x	x	x	x	x	7
Ireland	x	x	x	x	x	x	x	7
Italy	x	x	x		x	x	x	6
Spain	x	x	x	x	x	x		6
Portugal	x	x	x		x	x		5
Hungary	x			x	x		x	4
Estonia	x			x		x	x	4
Slovenia	x	x	x			x		4
Iceland	x		x	x				3
Slovakia					x		x	2
Denmark	x		x					2
Finland							x	1
USA			x		x	x	x	4

Outside OECD: Bulgaria, Latvia, Lithuania, Romania, Ukraine most affected

Strong influence of the recession on young adults

Sharpest swings in unemployment, precarious employment

- Rising numbers of NEETs (not in employment, education, training)

Housing market

+ Declining house prices

- Crash of new housing construction
- Low availability of affordable credit and mortgage

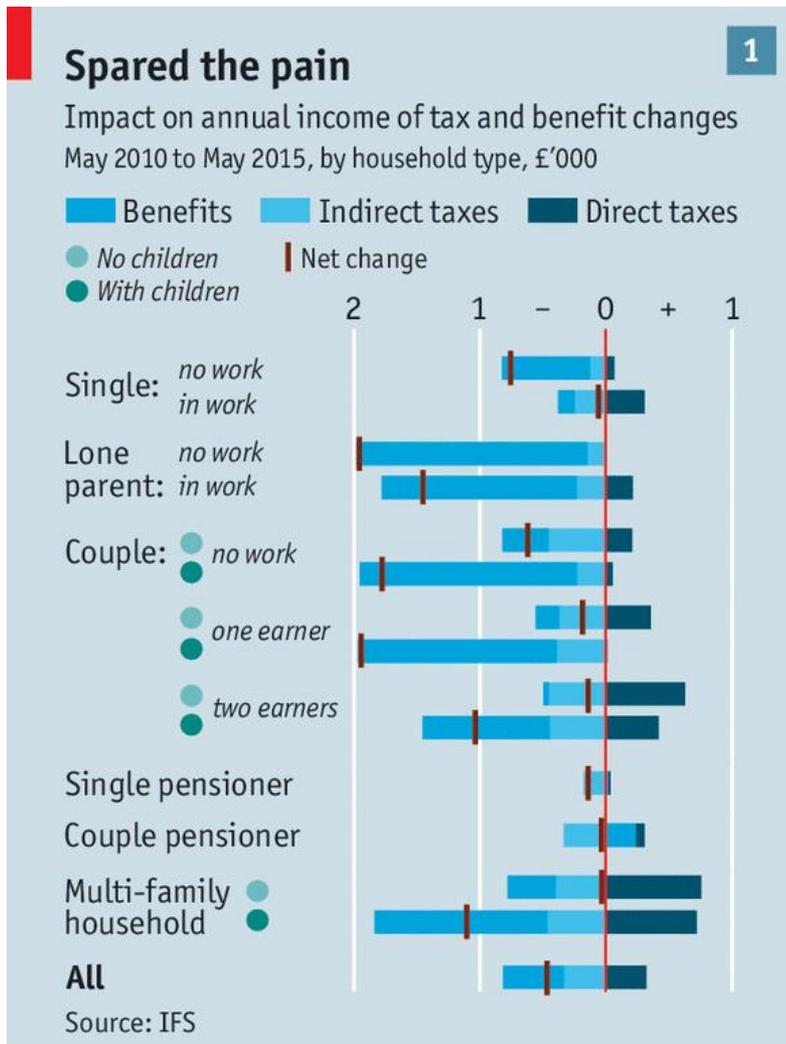
Staying longer in education

- Low employment opportunities and LM competition an incentive
- Higher debt, higher costs of education in some countries

“Boomerang kids”: Staying longer with parents

Policies: Less spending on young adults

Austerity policies: The elderly doing fine during the recession in Western Europe?



Impact of tax and benefit changes on annual income of UK households, 2010-15

Source: Economist, February 28 2015;
<http://www.economist.com/news/britain/21645224-wealthy-old-people-are-unnecessarily-pampered-public-purse-everlasting-life>

First marriage trends during the recent recession

This part largely based on

C. Berghammer & T. Sobotka. 2016. "Falling first marriage rates in Europe during the „Great Recession“. A comparison of 17 countries."

Paper presented at the EPC Conference, Mainz, September 2016

Effect on partnership formation

Aggregate unemployment trends influence partnership formation & marriage

- Delayed partnerships and marriages
- Indirect effect on first birth rates
- This link most prominent in East Asia
- **Japan:** recession makes marriage unaffordable for many couples (Retherford et al. 2001)

US: Pew Research Center Survey 2009 (respondents aged 25-34)

- 21% said they postponed marriage
- 15% said they postponed getting a child

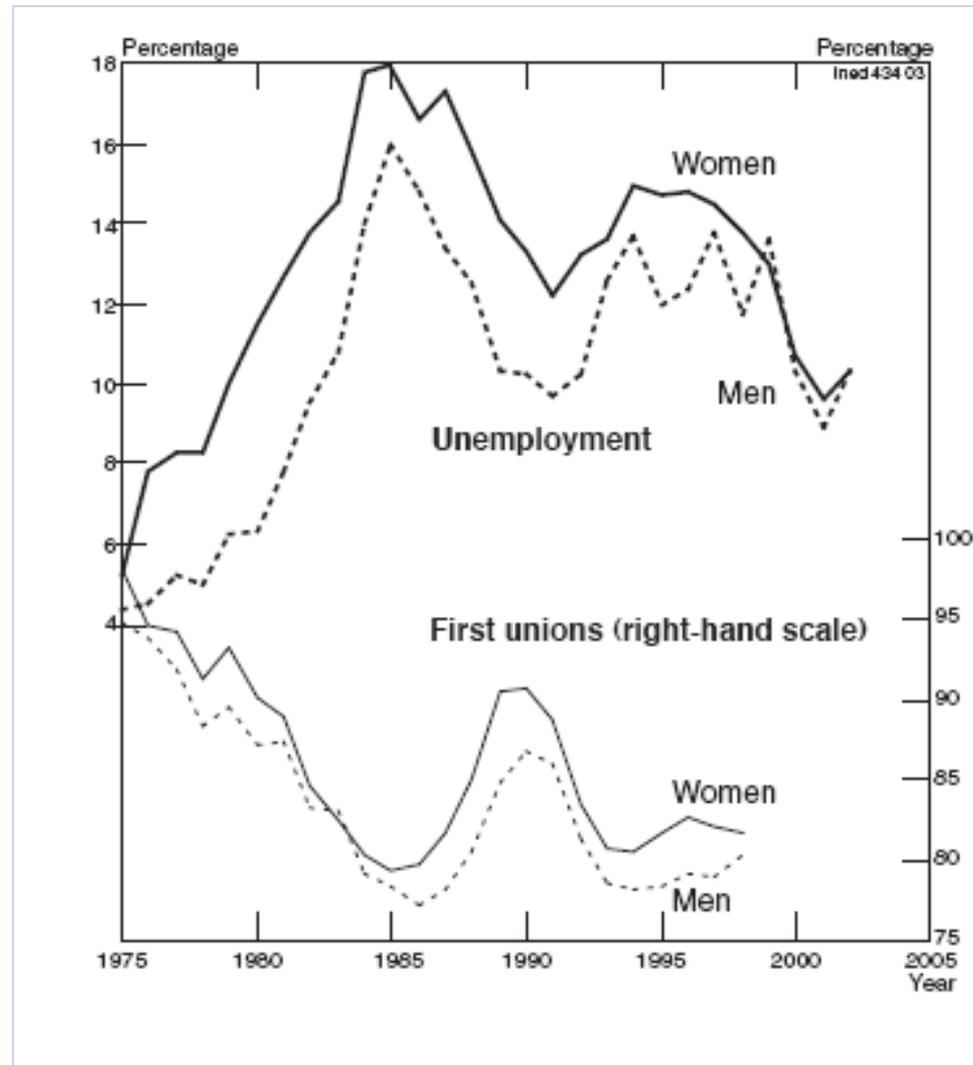
Youth unemployment (% aged 20-24) and partnership formation in France

Source:

F Prioux (2003)

« Age at first union in France: a two-stage process of change. »

Population-E 58(4): 559-578.



Why focus on marriage?

- Higher expectations & stronger economic underpinning of marriage than cohabitating relationships
 - Entry into cohabiting unions might be less affected
- Perceived higher level of commitment in many countries
- Data availability
- Long-term retreat from marriage (except for the brief stability in marriage rates in the early 2000s, prior to the recession)

→ The Great Recession may have accelerated the shift away from universal & early marriage to elective & late marriage

Key questions

Trend reversal during the recession? How did marriage trends in different parts of Europe evolve during the recession?

Differences by age: Did first marriage rates fall most strongly among young women below age 25?

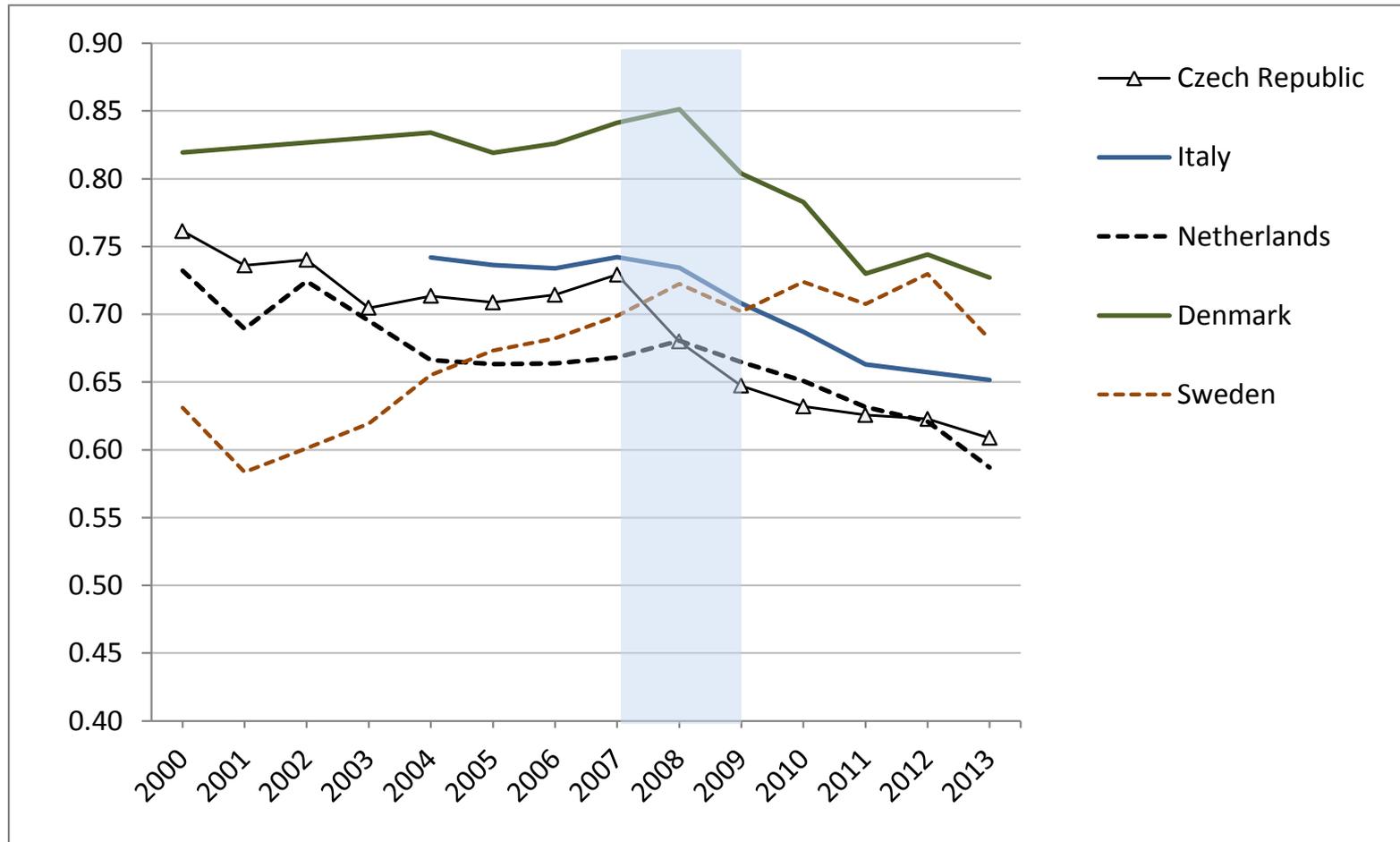
Consequences for permanent non-marriage: Did the recession accelerate cohort shift away from marriage?

Data

Computations based on Eurostat and national statistical offices

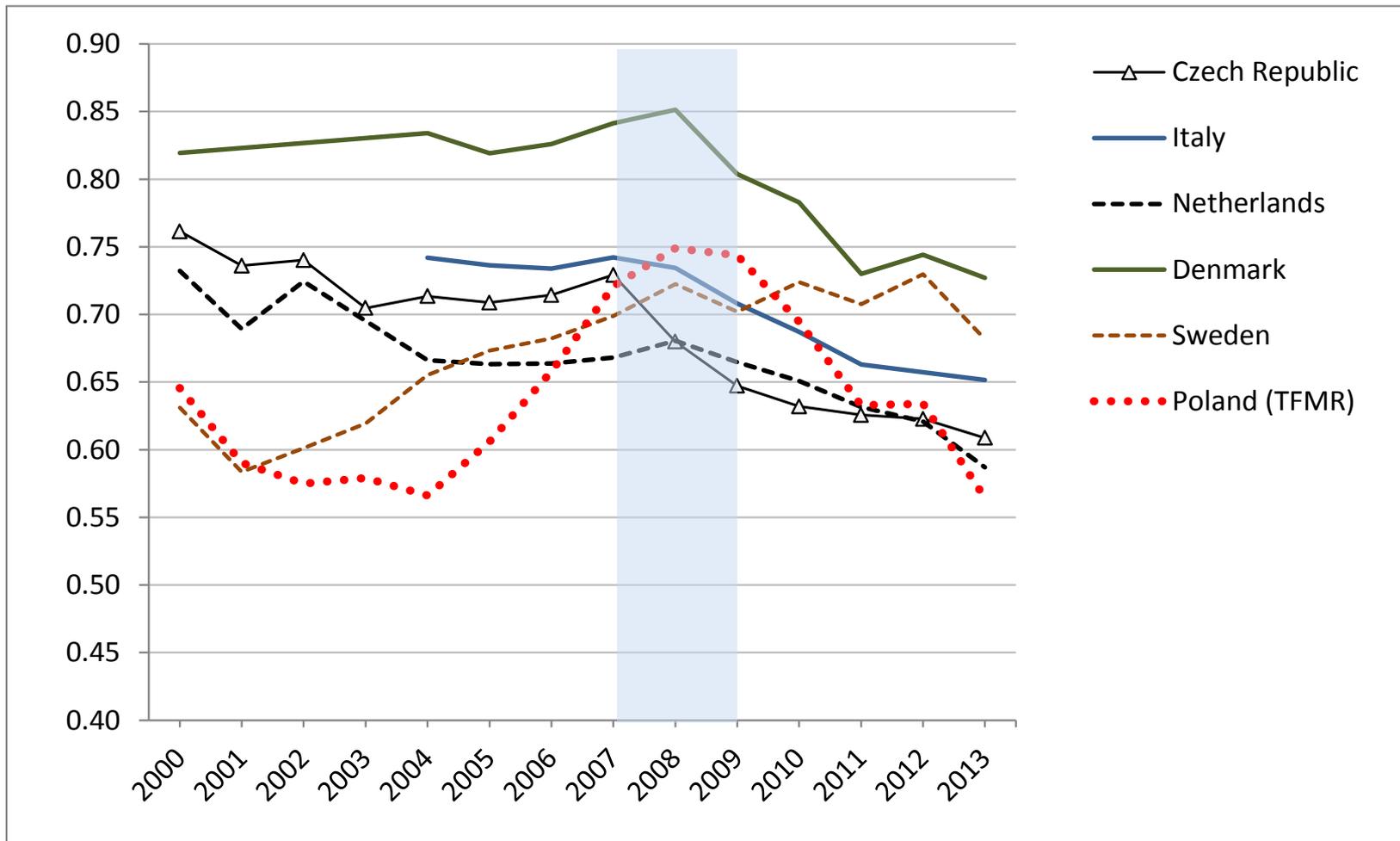
- Reconstructed **first marriage probabilities** for women, total (TFMp) and by age for 17 countries, 2000-2013 (ages 16-59)
- **Cohort projection** of the share of women born 1972-1984 remaining never married: pre-recession trend projection (2007) and post-recession “stable rates” projection (2013)

Total first marriage probability (TFMp), 2000-13, women, selected countries



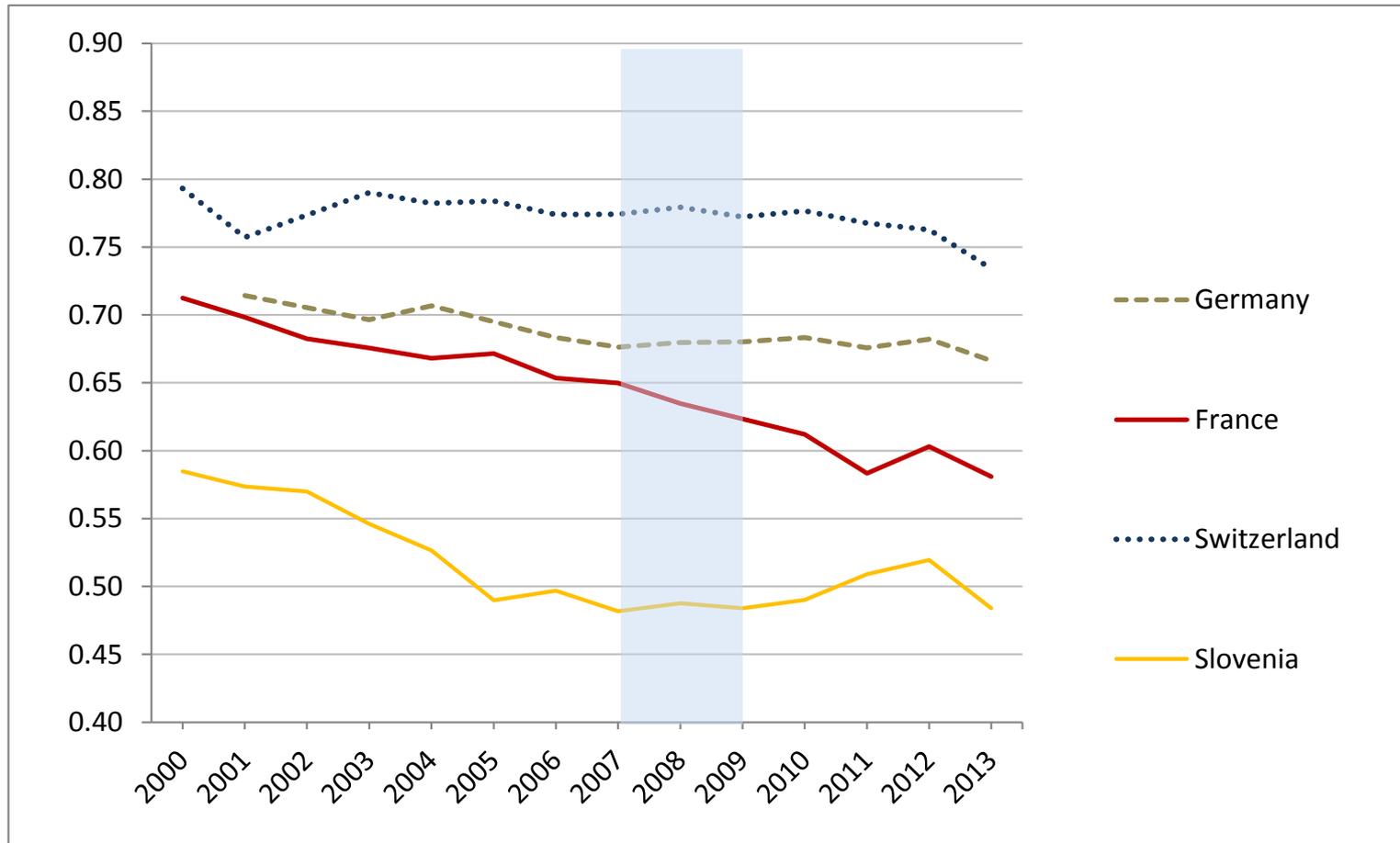
Change in the pre-recession dynamics in 10 countries (accelerated decline, stagnation to decline or increase stops)

Total first marriage probability (TFMp), 2000-13, PL: Total First Marriage Rate (TFMR)



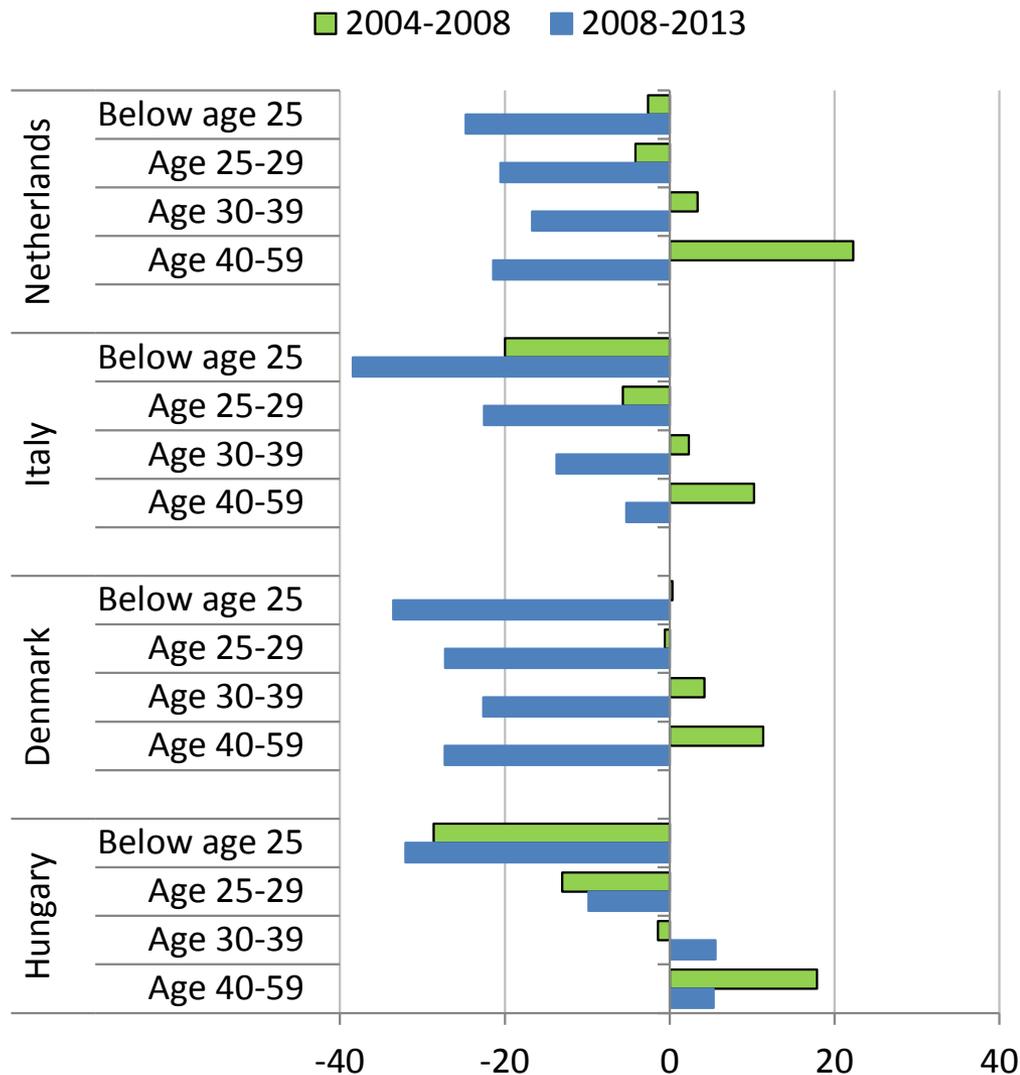
Note: TFMR strongly distorted by changes in first marriage timing, not directly comparable to TFMp

Total first marriage probability (TFMp), 2000-13, women, selected countries



No obvious change in marriage dynamics, no clear trend or unexpected upturn in 7 countries

Changes in age-specific first marriage probability (in %), women, selected countries and age groups



Different age-specific patterns across countries

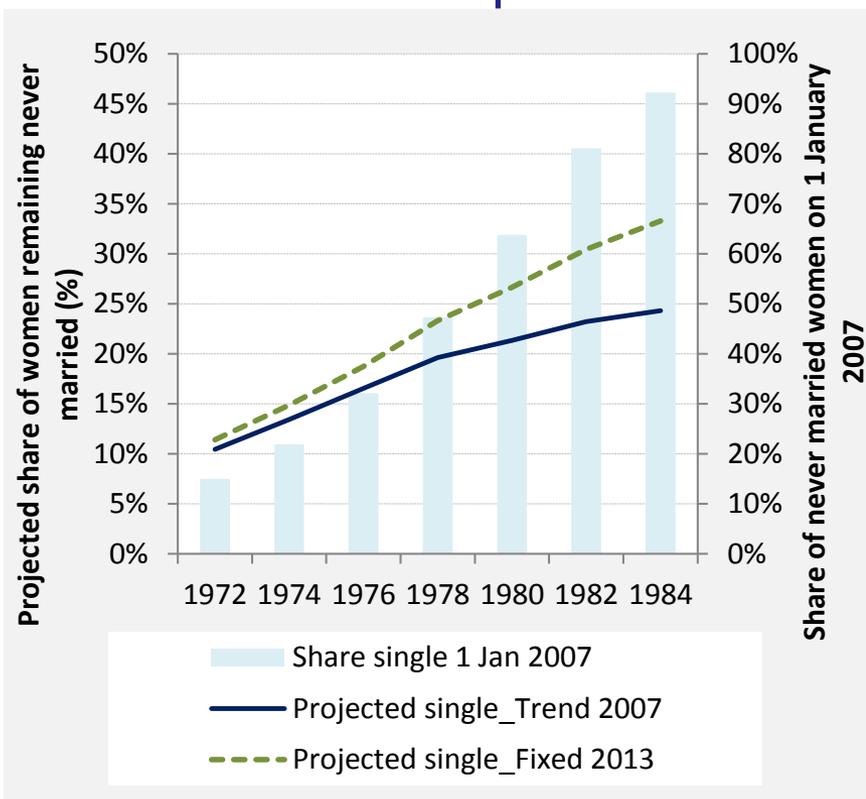
Example: in the Netherlands in the age group < 25, the first marriage rates fell by 3% between 2004-2008 and by 25% between 2008-2013

Marriage projections of the share of women remaining never married, cohorts 1972-84

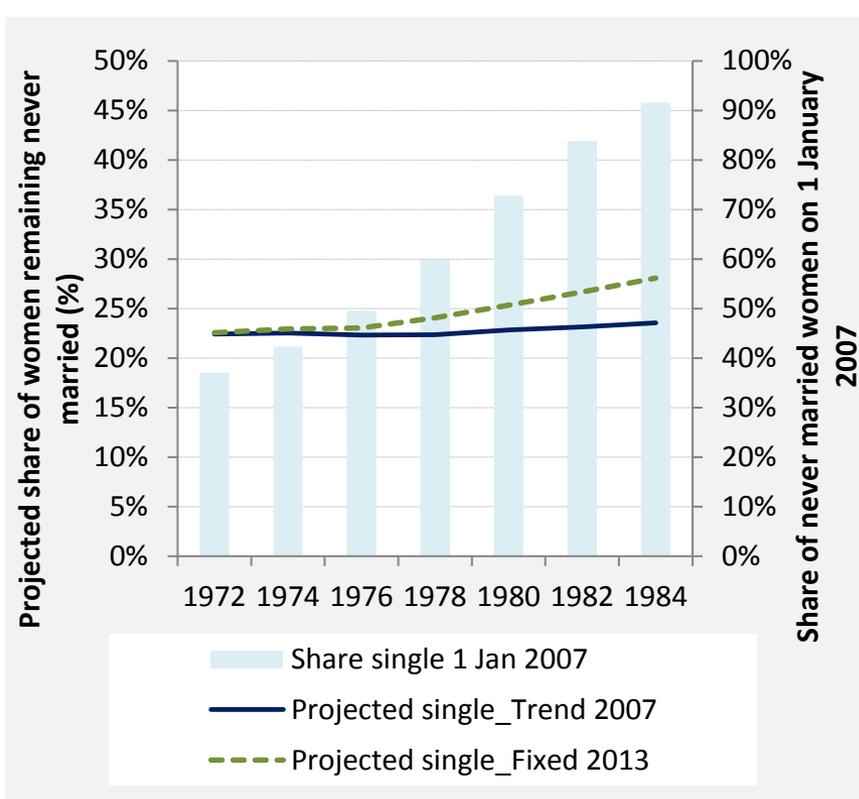
Comparing two scenarios:

Continuing pre-recession trend ('trend 2007') with stabilization of post-recession marriage patterns ('fixed 2013')

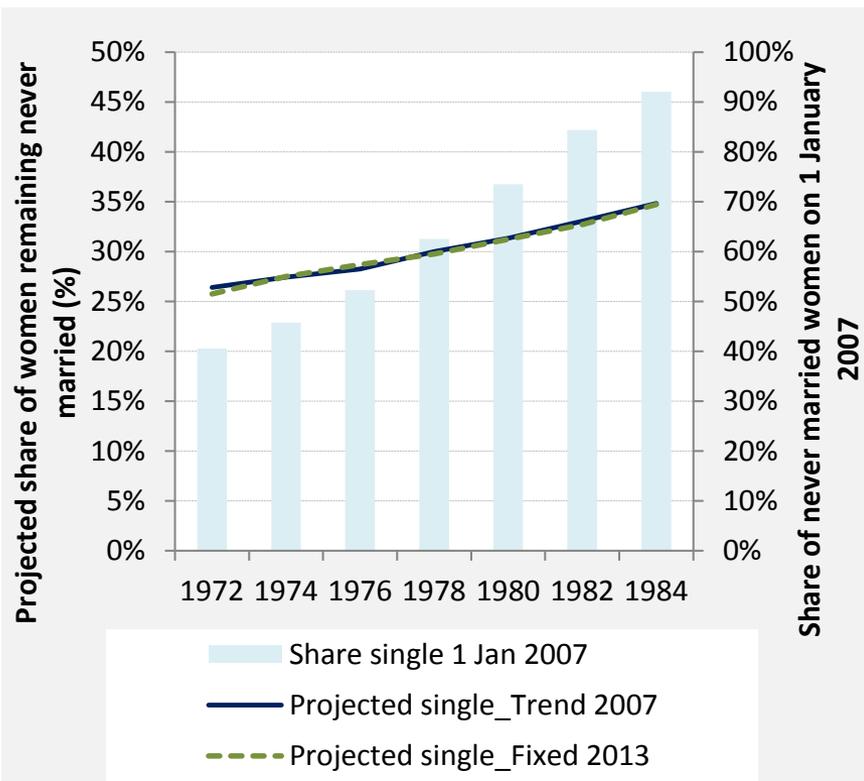
Czech Republic



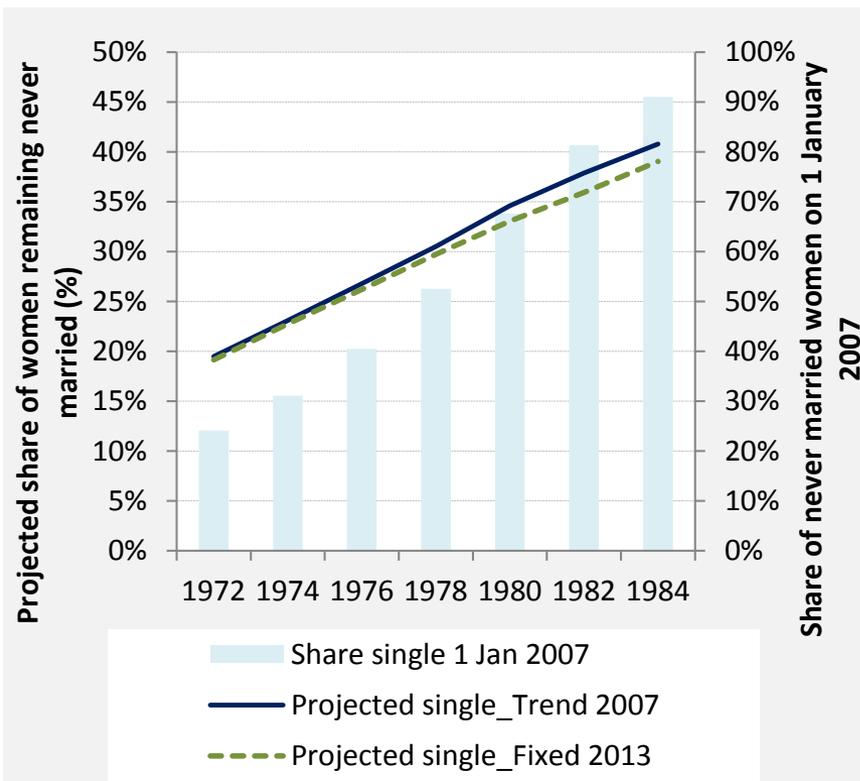
Finland



France



Hungary



Summary for 12 countries

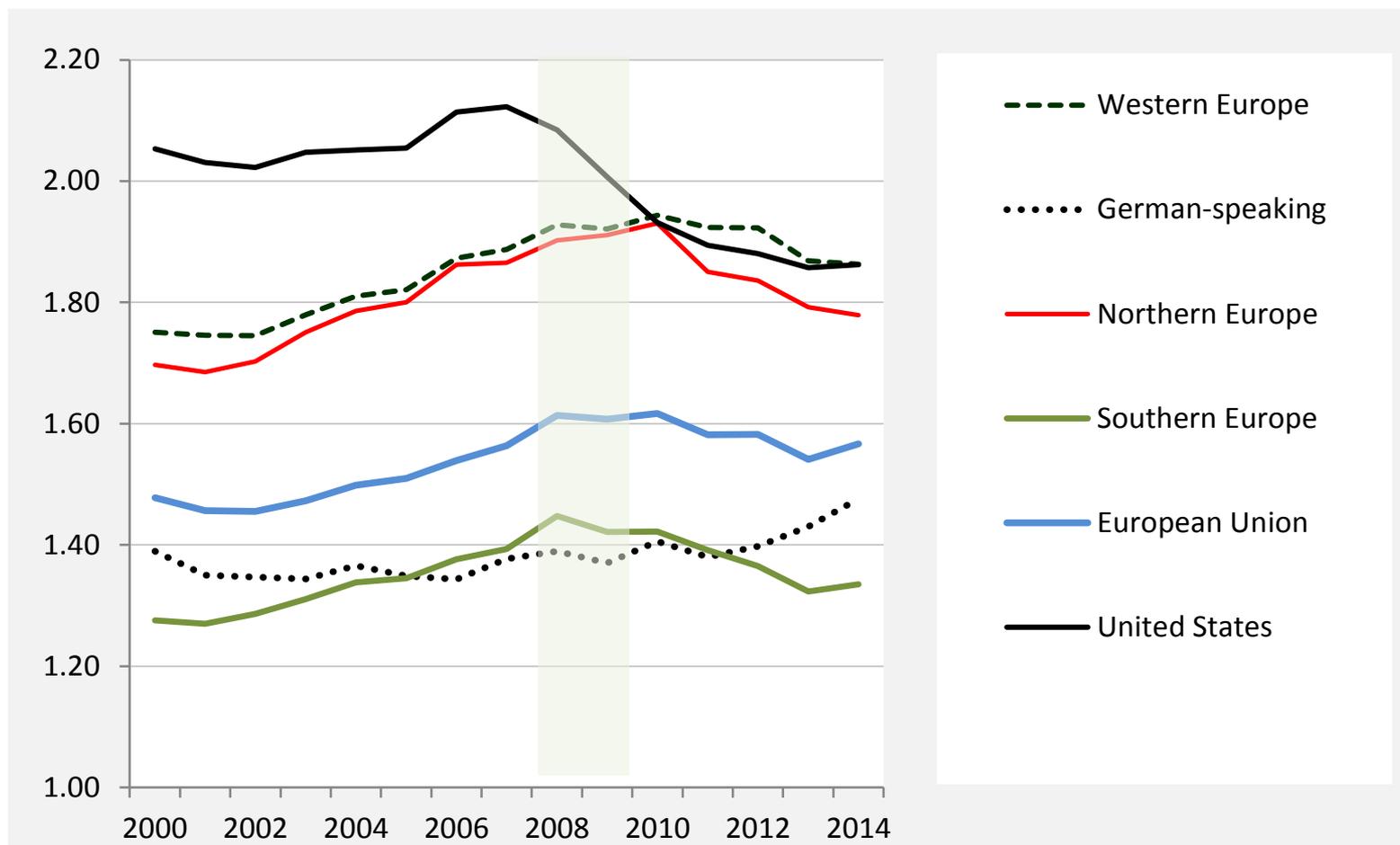
- In six countries (SW, IT, LV, FI, DK, CZ), the trend towards non-marriage intensified during the recession; most strongly in Denmark and Czechia
- In five countries, the recession resulted in no/few changes in cohort marriage dynamics (FR, NL, CH, HU, DE). Slovenia outlier (more marr.)

Family formation and fertility during the recent recession

Strongest expected impact on fertility

- Countries hit most by the recession (Y/ mostly)
- Weaker welfare state environment (no ?)
- More educated F (?)
- Migrants (Y / mostly)
- Younger women (Y), first births (Y / mostly)
- Countries with more cuts in social spending (?)
- Countries where parental leave tied to previous employment (Partly)

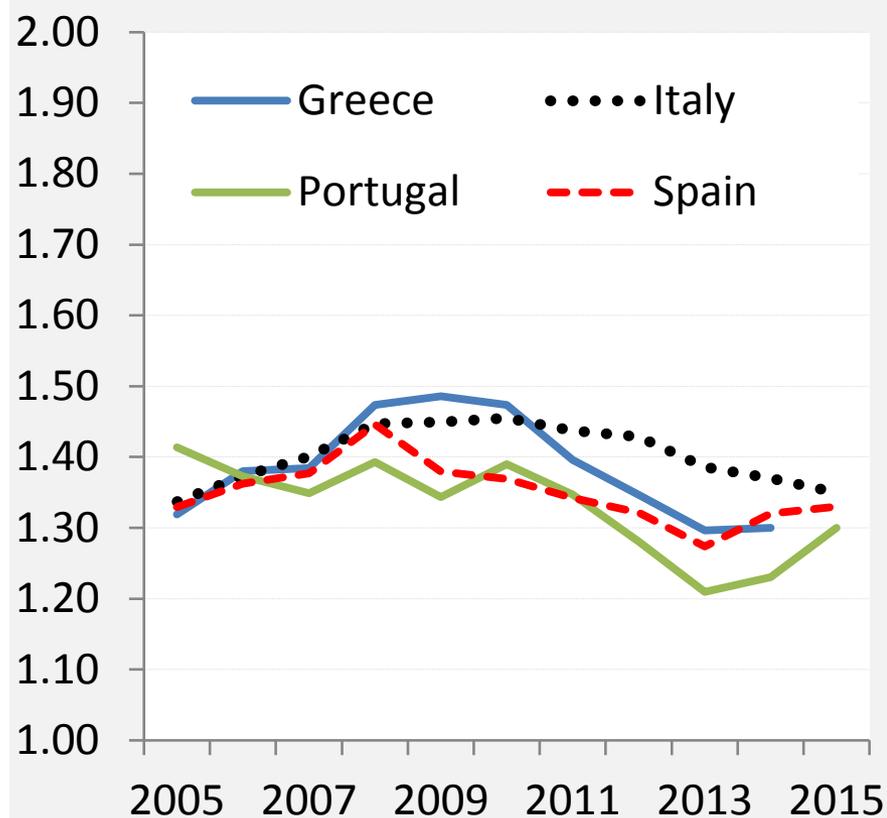
Trends in period Total Fertility Rate (births per woman), 2000-2014 (European regions and the US)



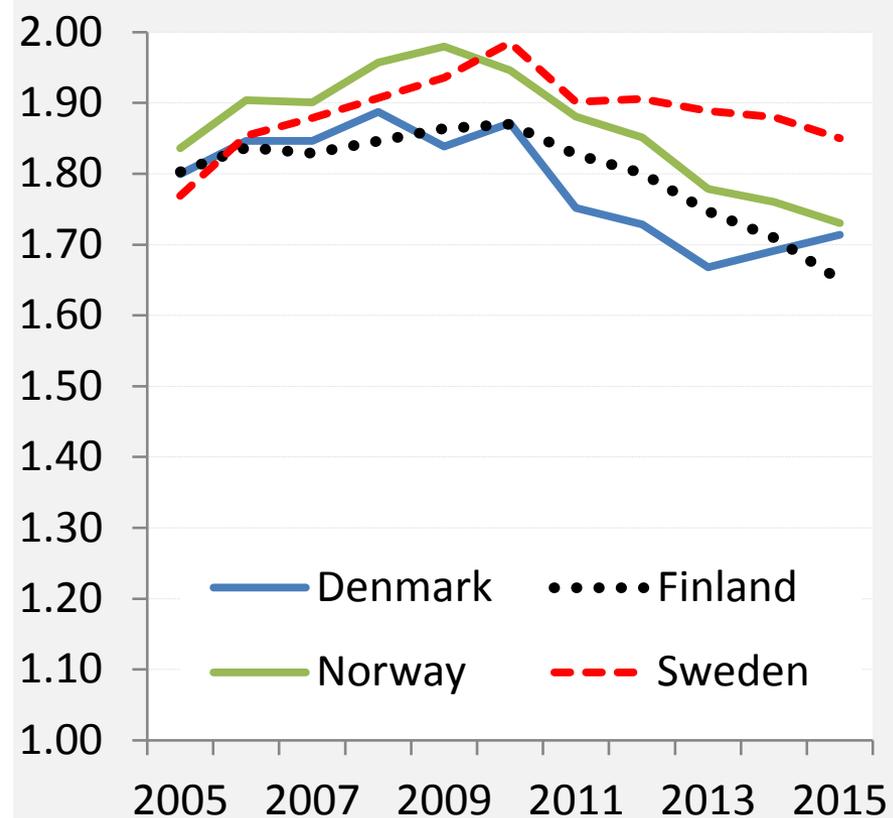
Sources: Own computations based on Eurostat 2015, European Demographic Datasheet 2016, national statistical offices

Trends in period Total Fertility Rate (births per woman), 2000-2015 (Southern Europe vs. Nordic countries)

South: "expected" downturns

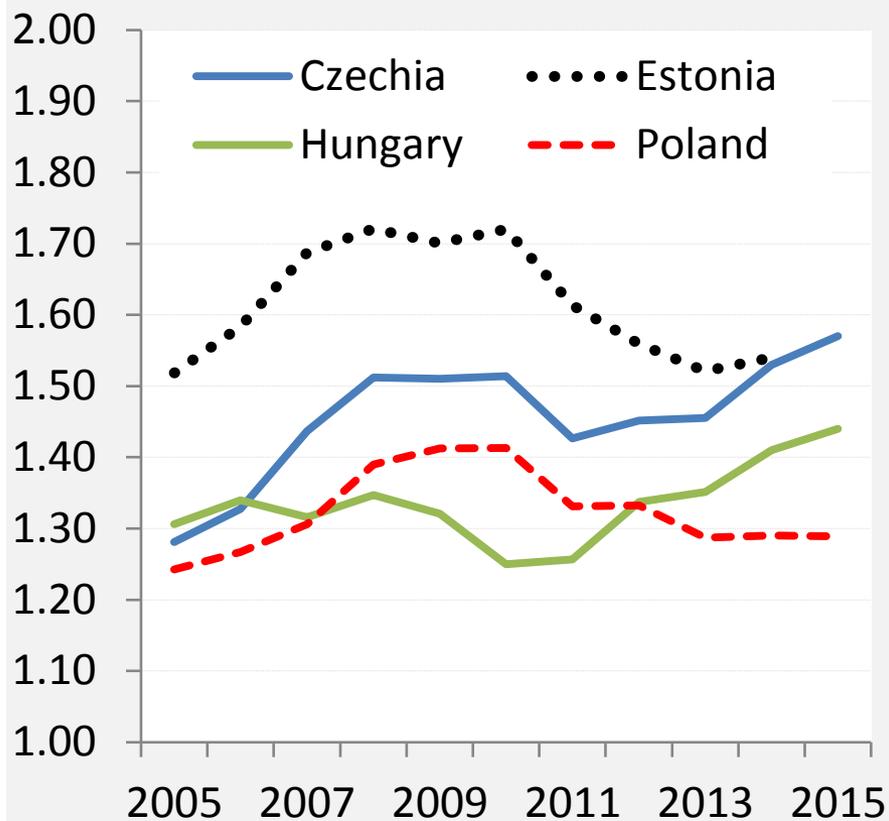


North: stronger than "expected" downturns

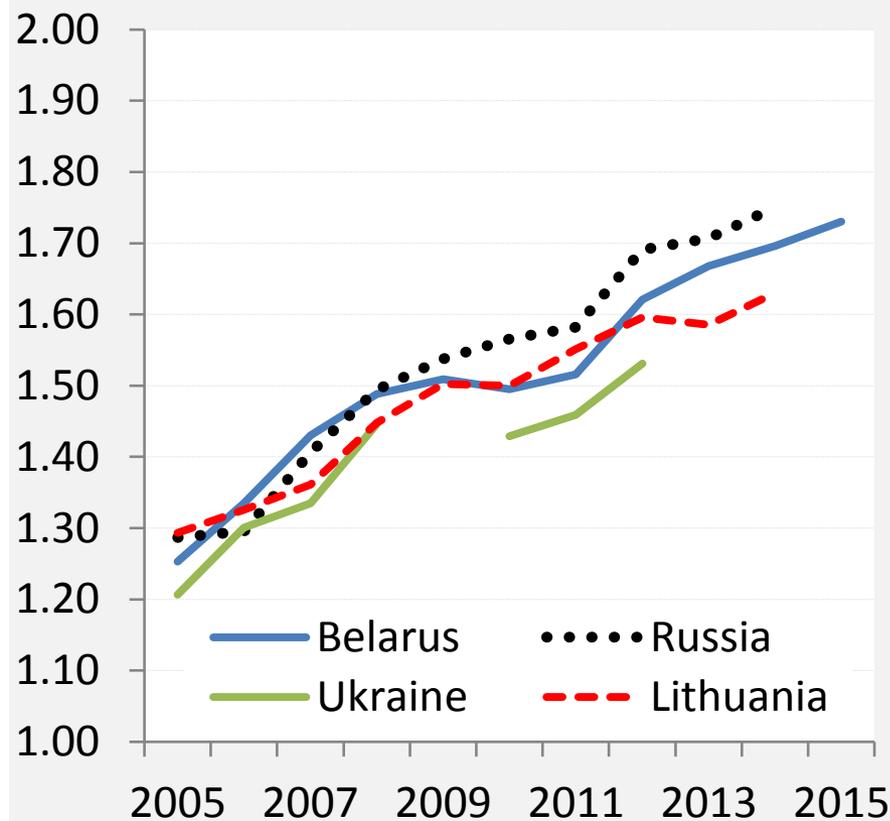


Trends in period Total Fertility Rate (births per woman), 2000-2015 (mixed evidence in Central and Eastern Europe)

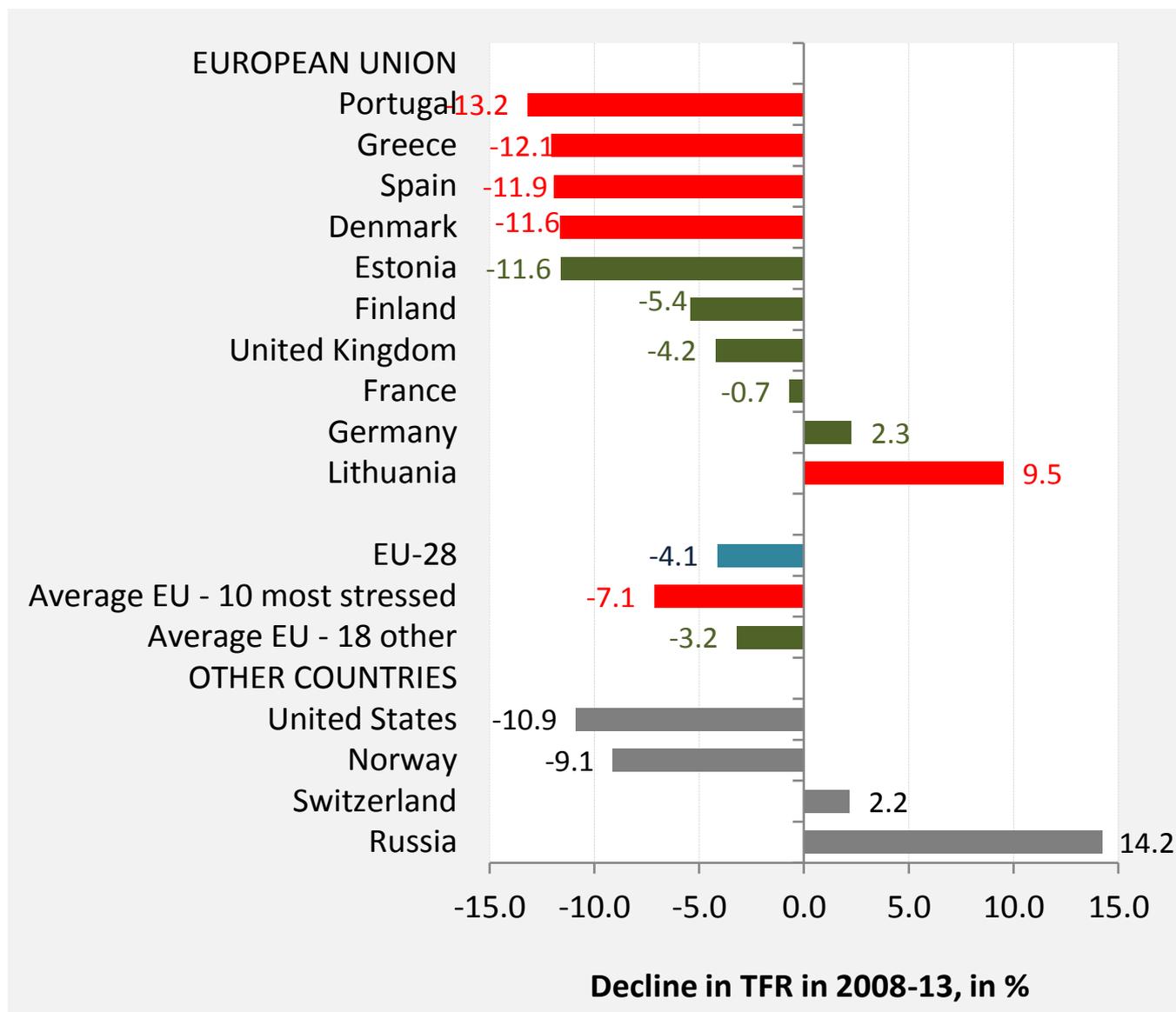
Fertility ups and downs in Central Europe



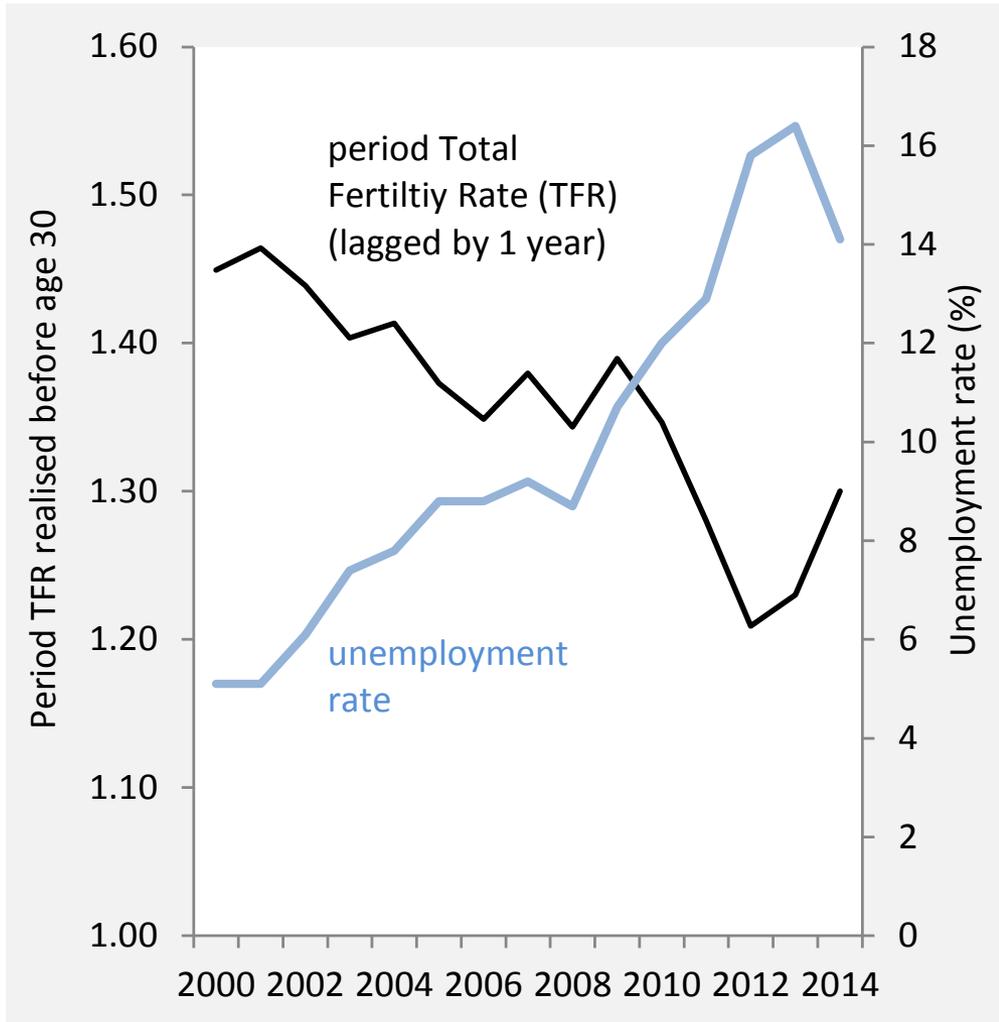
Policy-driven fertility upturns in some Eastern European countries?



Changes in period Total Fertility Rate (births per woman), 2008-2013, in % (selected countries)



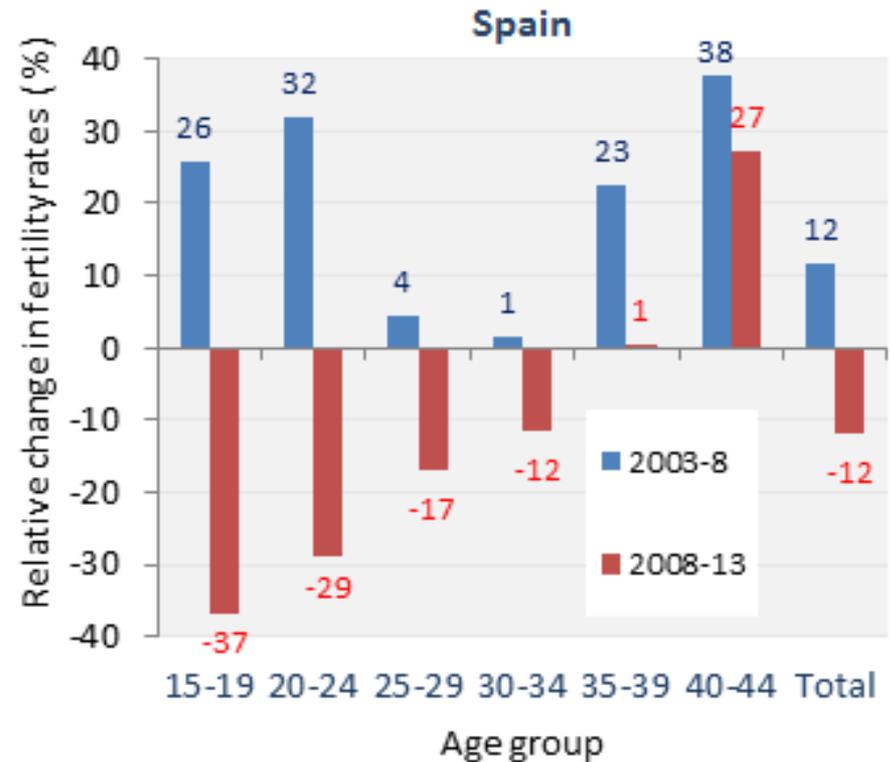
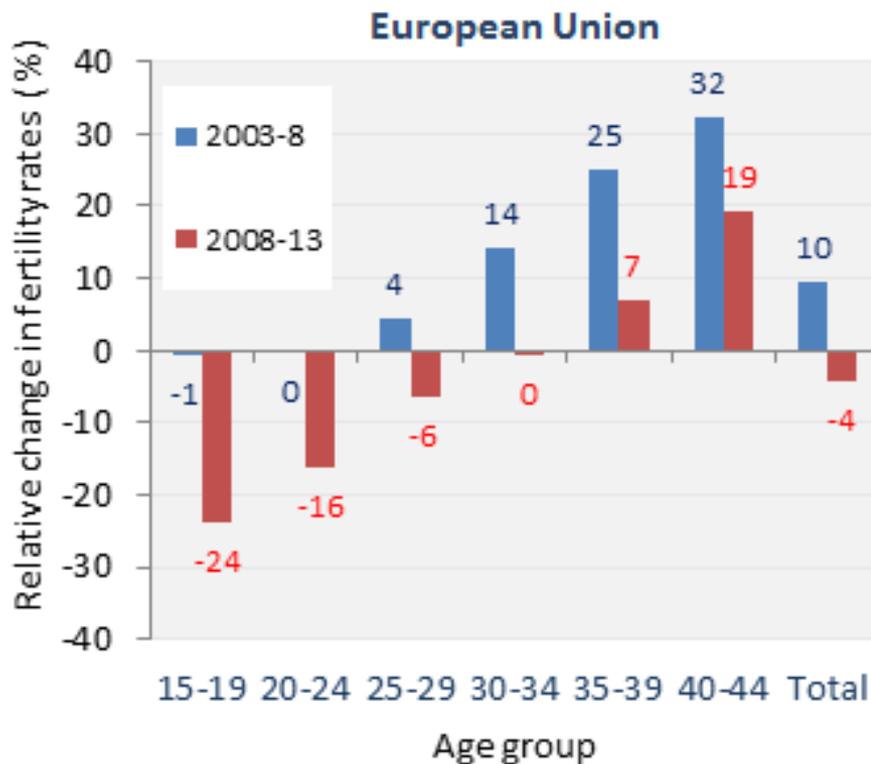
Close correlation of fertility trends with unemployment, especially in Southern Europe



Period TFR (births per woman) vs. unemployment rate (%) in Portugal, 2000-2015 (fertility rates lagged by 1 year)

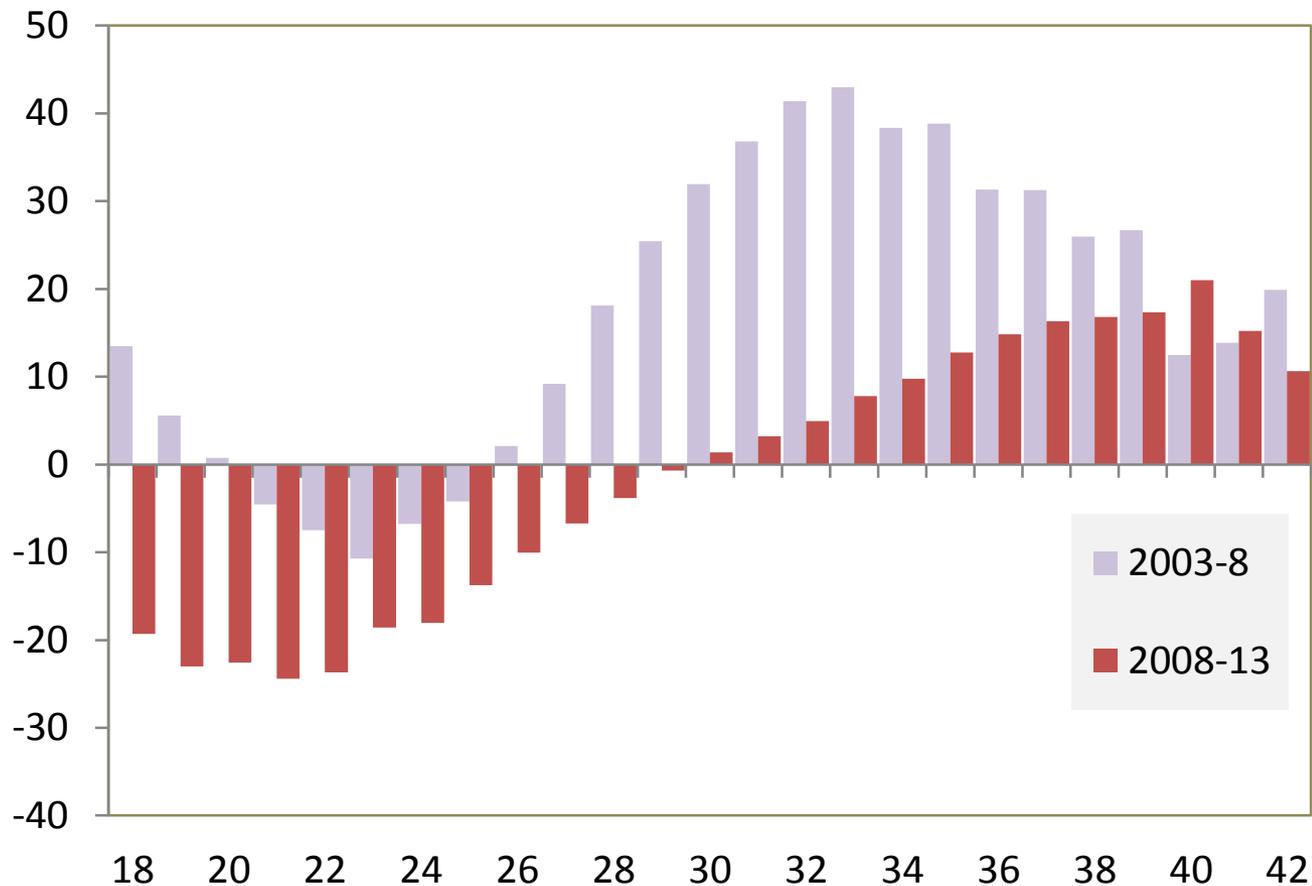
Timing of births before and during the recession: EU vs. Spain

Changes in age-specific fertility five years before (2003-8) and five years into the recession (2008-13)



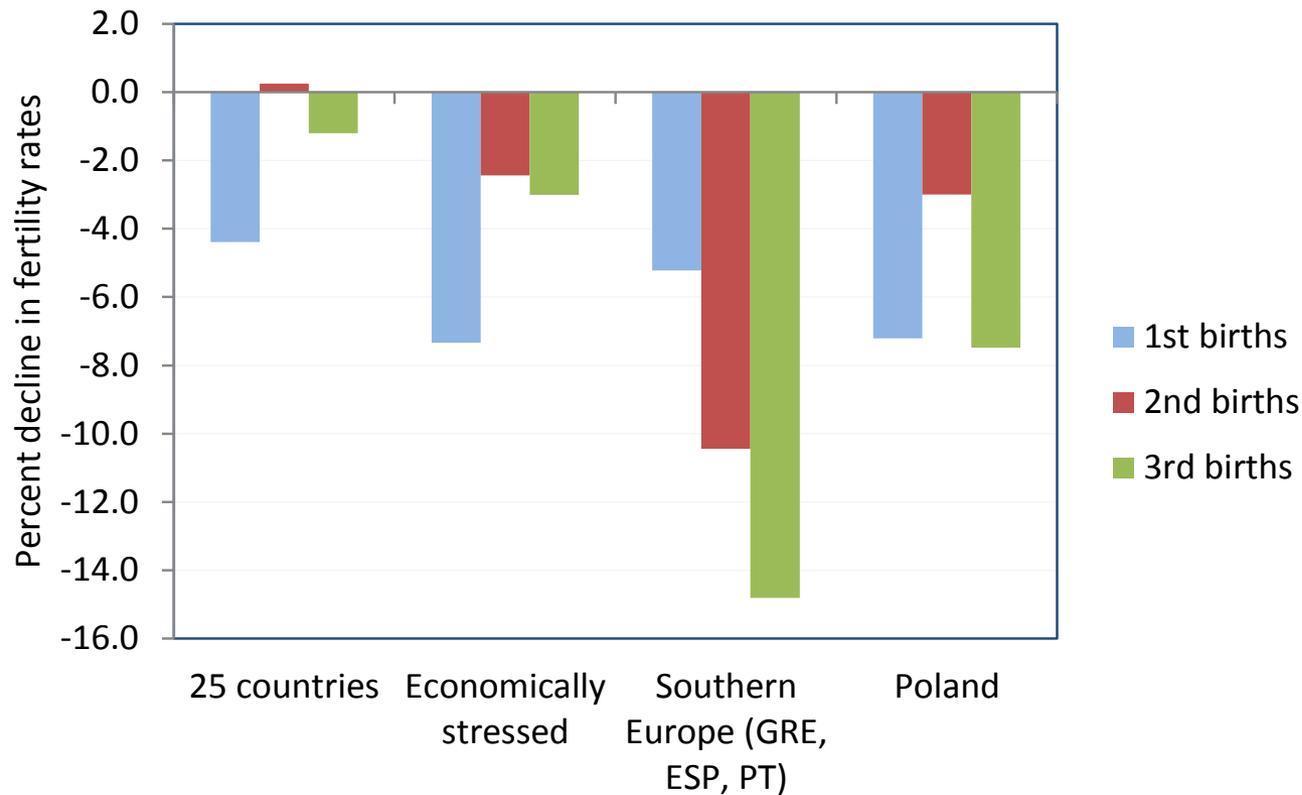
Timing of births before and during the recession in Poland

Changes in age-specific fertility five years before (2003-8) and five years into the recession (2008-13)



First births most affected – except in Southern Europe

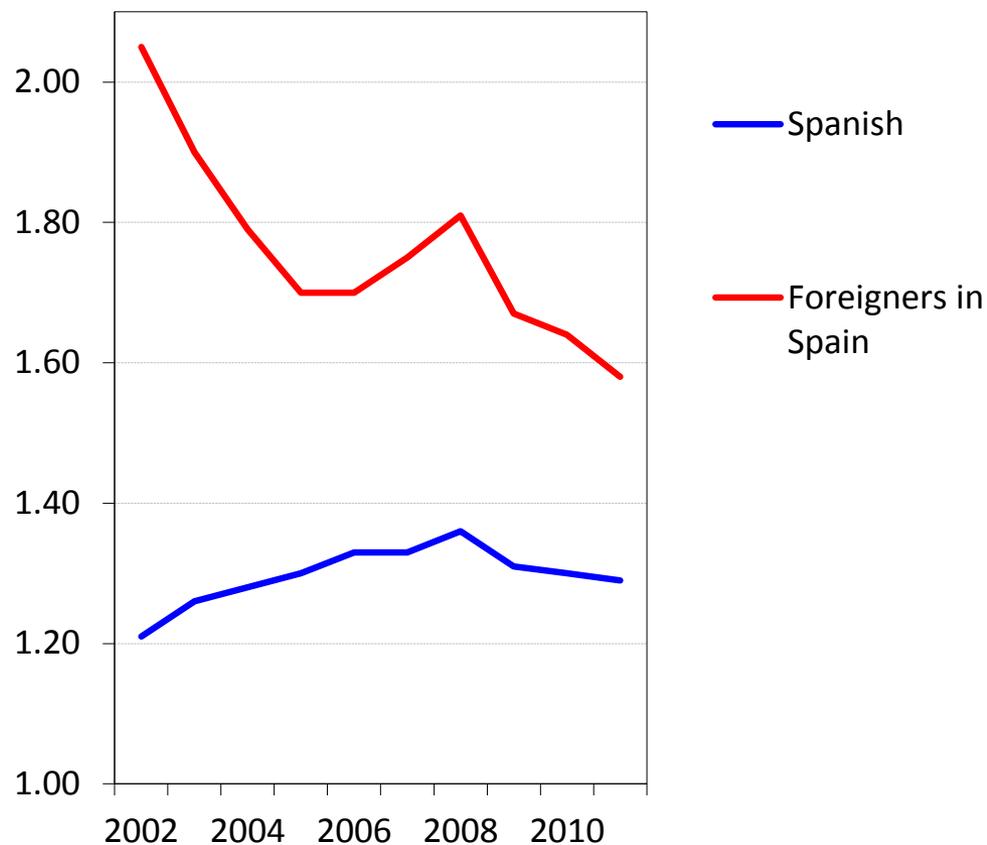
Changes in total fertility rates by birth order, in % (2008-12)



Fertility falling fast among migrants

Period fertility in Spain among women with Spanish and foreign citizenship, 2002-12

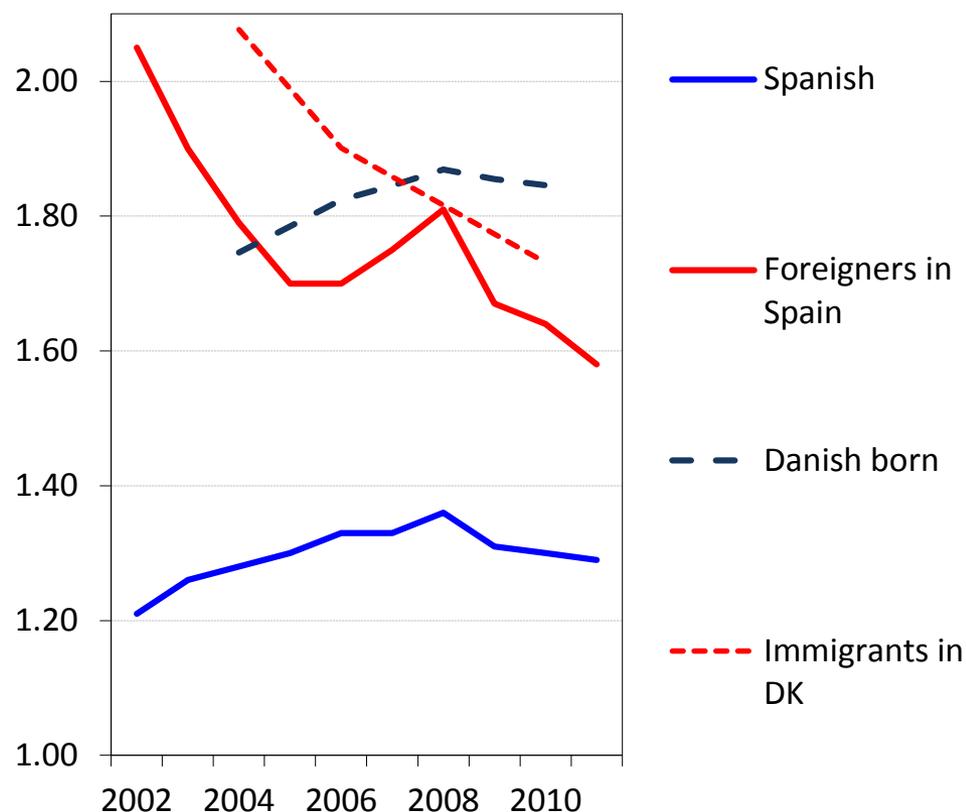
...in Spain...



Fertility falling fast among migrants

Period fertility in Spain and Denmark by citizenship (Spain) and country of birth (Denmark), 2002-12

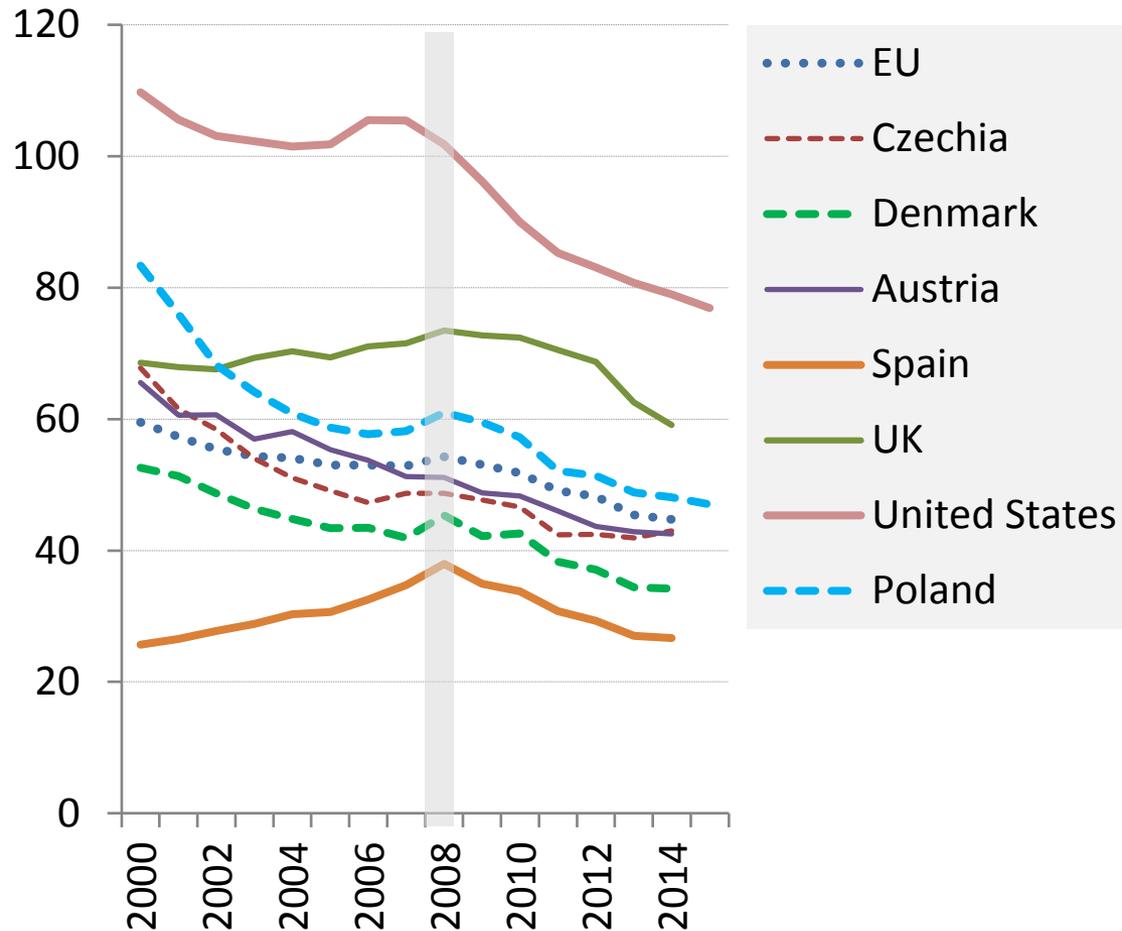
...in Spain...
and Denmark



Sources: INE (2013) for Spain, Vital Statistics Yearbooks (Statistics Denmark) for Denmark

Unexpected trend: Sustained fall in fertility among young adults during & after the recession

Number of births per 1000 women aged 20-24 in selected countries, 2000-2014



Main findings & Discussion

Marriage trends

Change in marriage dynamics during the recession in most countries

The economic underpinning of marriage: results broadly in line, but micro analysis needed to provide more solid evidence

Continuing shifts to later ages; further de-coupling of marriage and parenthood

- First marriages at post-reproductive ages, especially among women aged 50-59, becoming more common

Rapid rise of cohort non-marriage:

- Around a quarter of women born in 1980 projected to stay never married (21% in CH, 25% FIN to 33% in HU; but 47% in Slovenia)

The observed shifts go beyond a simple postponement of marriage

- No signs of a lasting “marriage recovery” as recently envisioned in the *Gender Revolution* framework

Family formation and fertility during the recent recession

At least brief fertility decline in almost all European countries

- Close relationship with the severity of the recession (esp. unemployment trends)
- Accelerated postponement of first births,
- Fast falls in fertility rates before age 25
- Sharper falls among foreign-born women
- Similarity of fertility trends in broader regions
- Policy-driven fertility rises in some CEE countries

Three fertility puzzles:

- Why sharp declines in Nordic countries?
- Why sustained falls in early fertility even after the recession?
- The role of policies and cuts in government spending in fertility shifts during the recession

Discussion: Recession and family trends

Marriage and family might “react” to economic downs and ups more strongly than in the past

- Marriage more elective & marker of social status
- Fertility & pregnancies more under control than ever before

Continuing delays of childbearing: where are the limits?

- Spain, Switzerland, Italy, Korea: Mean age at first birth >30
- More women planning to have first birth after age 35
- Limited space for more postponement when the next recession strikes? More involuntary childlessness?

Childbearing below age 25 on the retreat – a permanent trend?

How can policies “smooth” family trends during recessions

- Decoupling of work experience and parental leave?
- Cash allowances for stay-at-home parents?

The Great Recession has accelerated some of the previous family trends

The “*lost generation*” of contemporary young adults, especially in the South?

- Accelerated postponement of first births
- More uncertainty in childbearing intentions among the childless
- Higher debt (US), lower income, more policy cuts (UK and elsewhere)
- Longer stay in parental home (evidenced in the US and parts of Europe)
- EU 2014: 13% young adults NEETs; 20% in ESP, 21% in IT, 27% in Greece (OECD 2014, Eurostat)

How to prevent further rise of “gerontocracy” and generationally inequitable spending?

- “Demeny voting”



European Demographic Data Sheet 2016



Data, texts, graphics, rankings & info on European fertility
and population trends

www.fertilitydatasheet.org

www.populationeurope.org

tomas.sobotka@oeaw.ac.at



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