

What do we know about the causes of the baby boom?

And what do we need to know?

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EU25 in 2004 (blue) and 2030

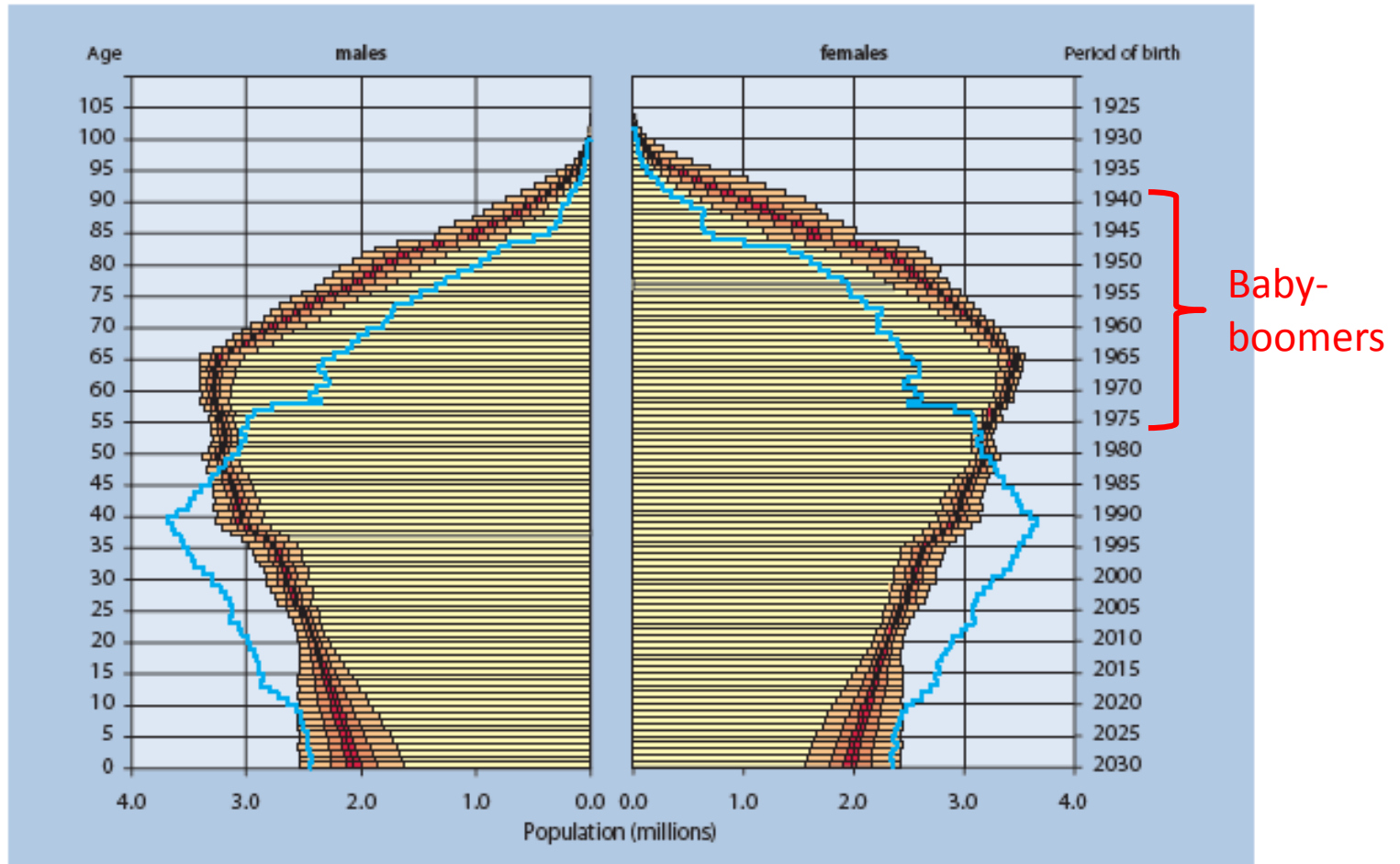


Figure 3: EU-25, 2030; blue line refers to EU-25, 2004

Research about baby boom

- Most research about the baby boom is about its consequences for
 - Labor market
 - Family relations & care
- Pensions
- Health (care)
- ...
- Surprisingly little research about the causes
 - Most known work
 - about the USA
 - by economists
 - There is no widely accepted theory

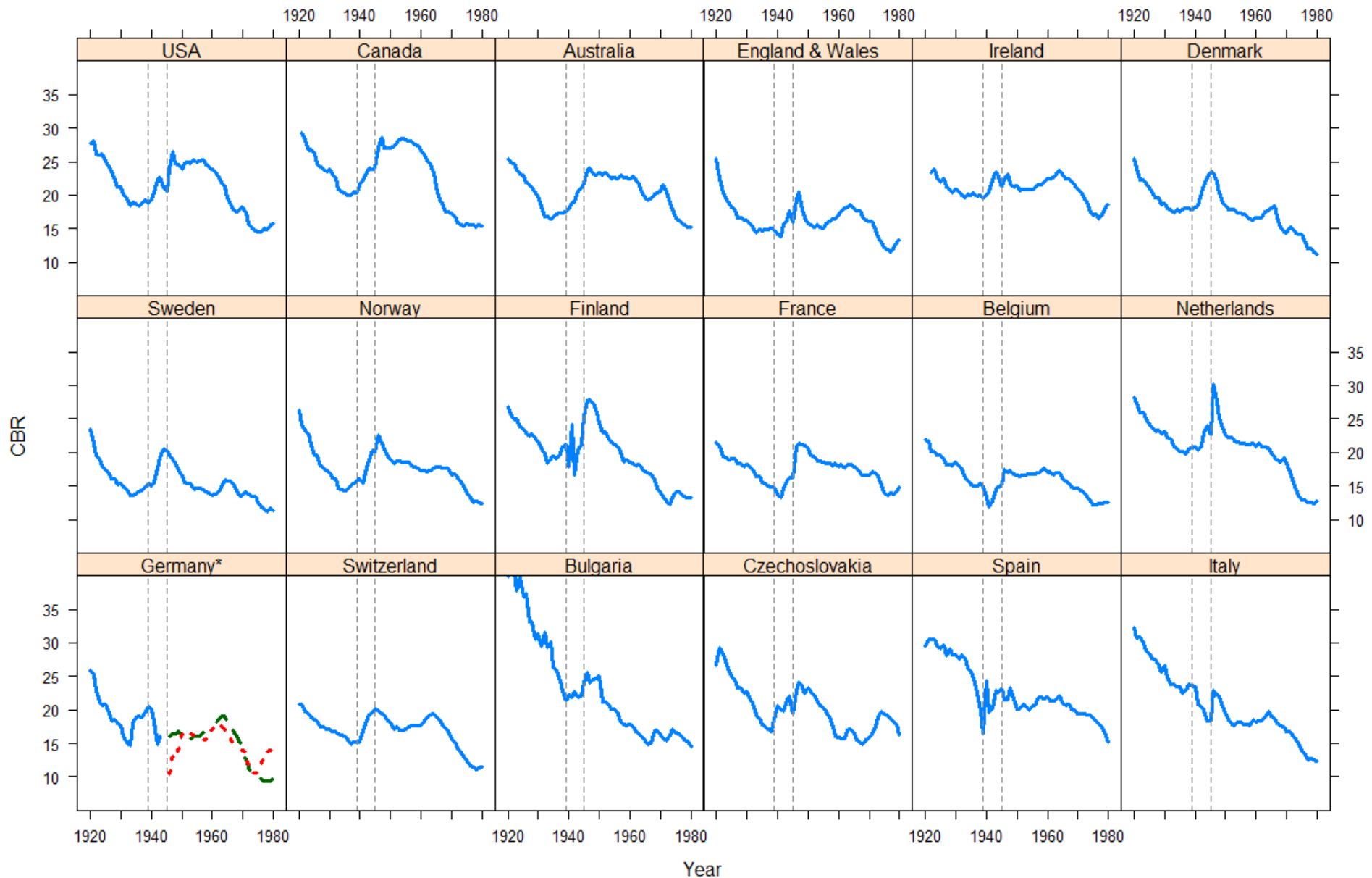
This presentation

1. In order to shed light on the causes, one first needs to know more about the **dimensions** of the baby boom in an **international** perspective
 - Timing of kick off
 - (Intensity, length, volume)
2. Demographic explanations/proximate causes
 - Postponement and catching up
 - Marriage boom & economic growth
 - Rising marital fertility
3. Economic explanations

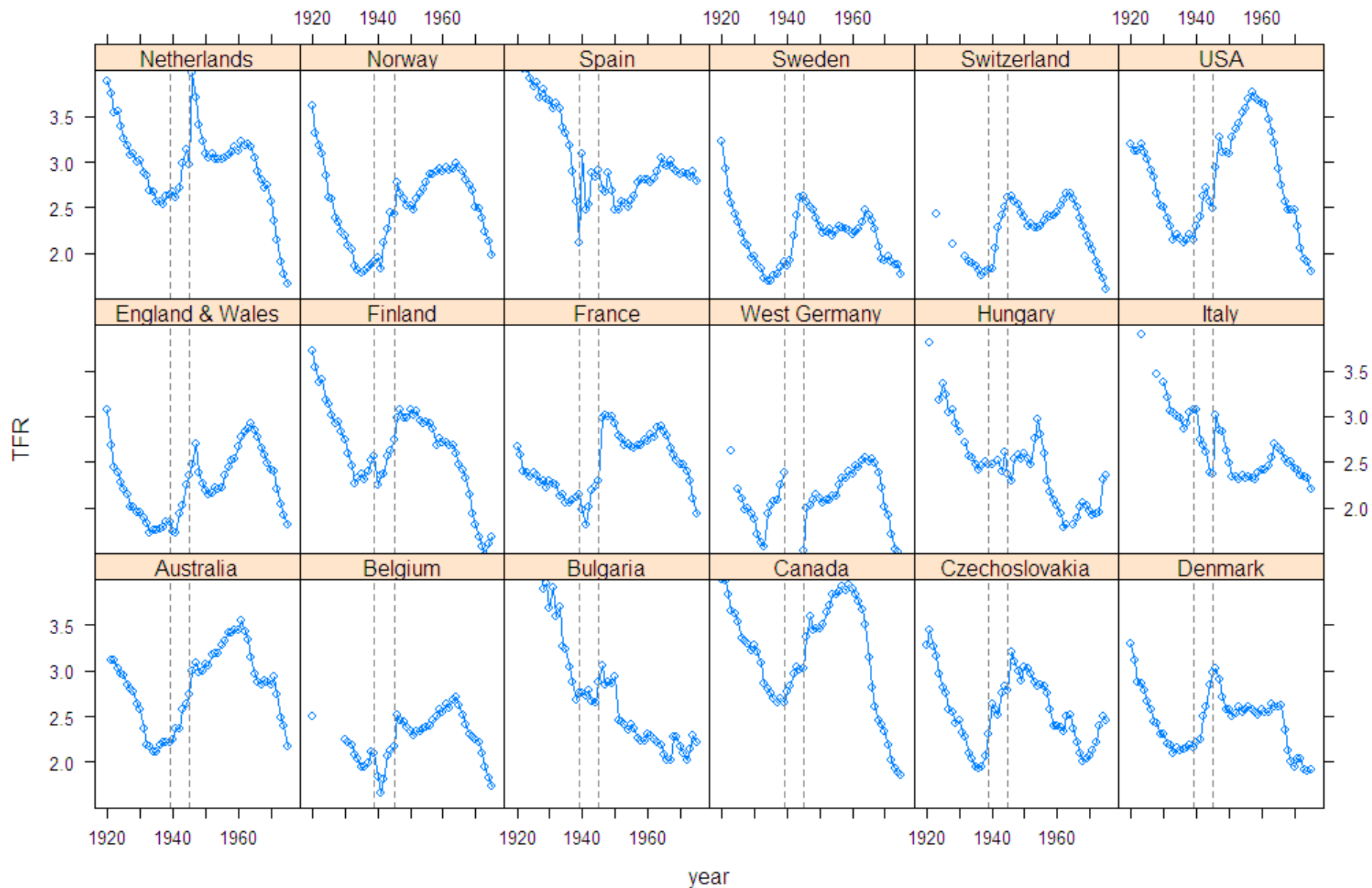
The start of the baby boom

- Most (economic) theories and empirical studies address only the birth rate as observed after World War II
- Forgotten or neglected: the recovery of fertility starts in most western countries before or during WWII
- By mis-dating the start of the recovery, important baby booms are left out of the picture, f.i. Sweden, Finland, Denmark, Norway

Crude Birth Rate 1920-'80



Period TFR 1920-1975

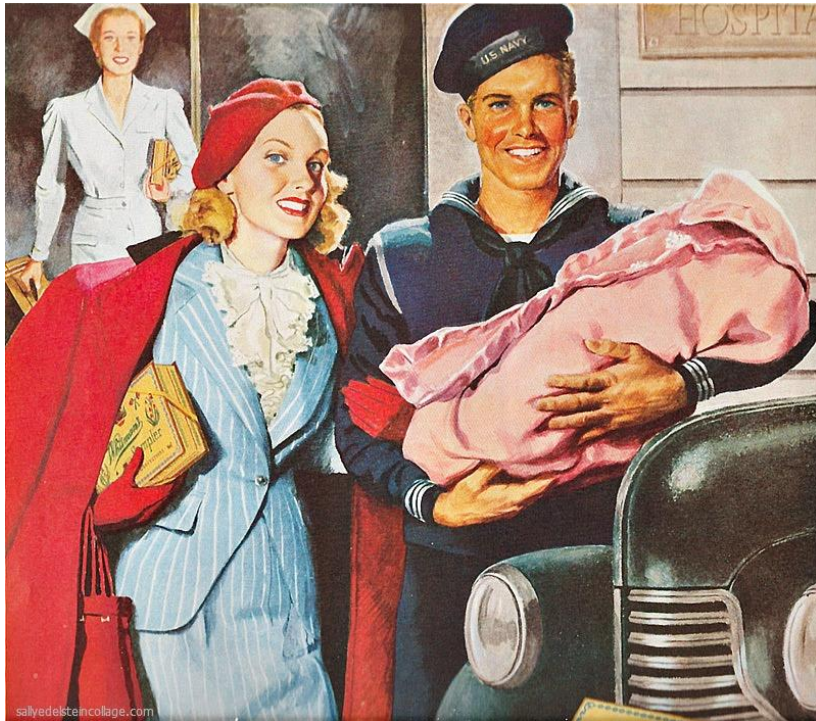


The recovery of fertility

- was not predicted by any expert; on the contrary, virtually all scholars expected further declines as urban, secularized life styles spread through the populations of the West
(Van Bavel 2010 in Population Studies)
- was noticed only after WWII (see major comments by Sauvy 1948, Hajnal 1947, Glass)

Explaining the Baby Boom: 1: catch up effect

“Marriage and births postponed during depression and war were made up after the war”

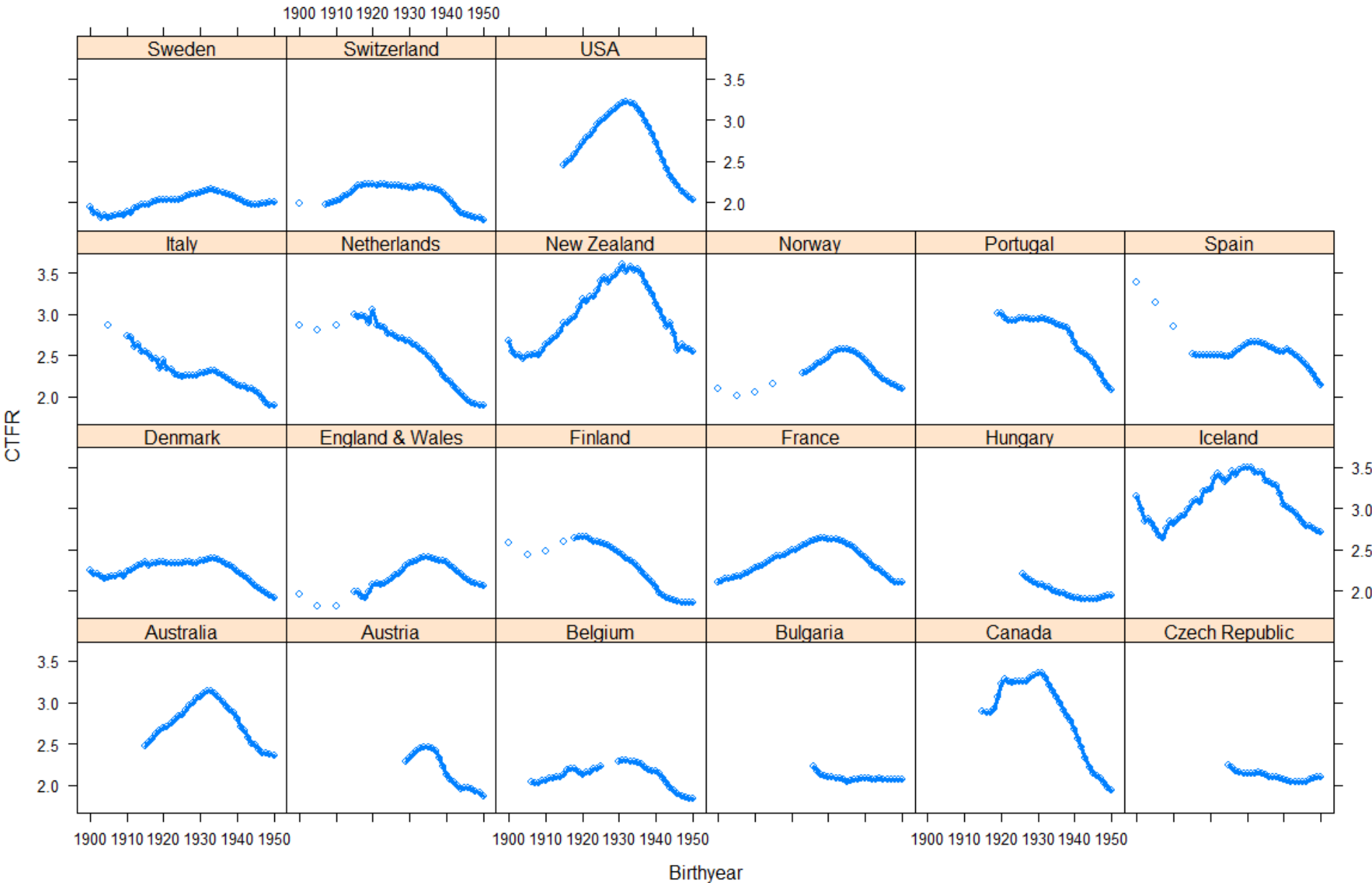


Explaining the Baby Boom:

1: catch up effect

- “Marriage and births postponed during depression and war were made up after the war”
- Can only be a very partial explanation because
 - The recovery of fertility lasted too long; some of the people who produced the baby boom were not even born during the depression and/or still a young child during WWII
 - Also cohort fertility was going up in most countries

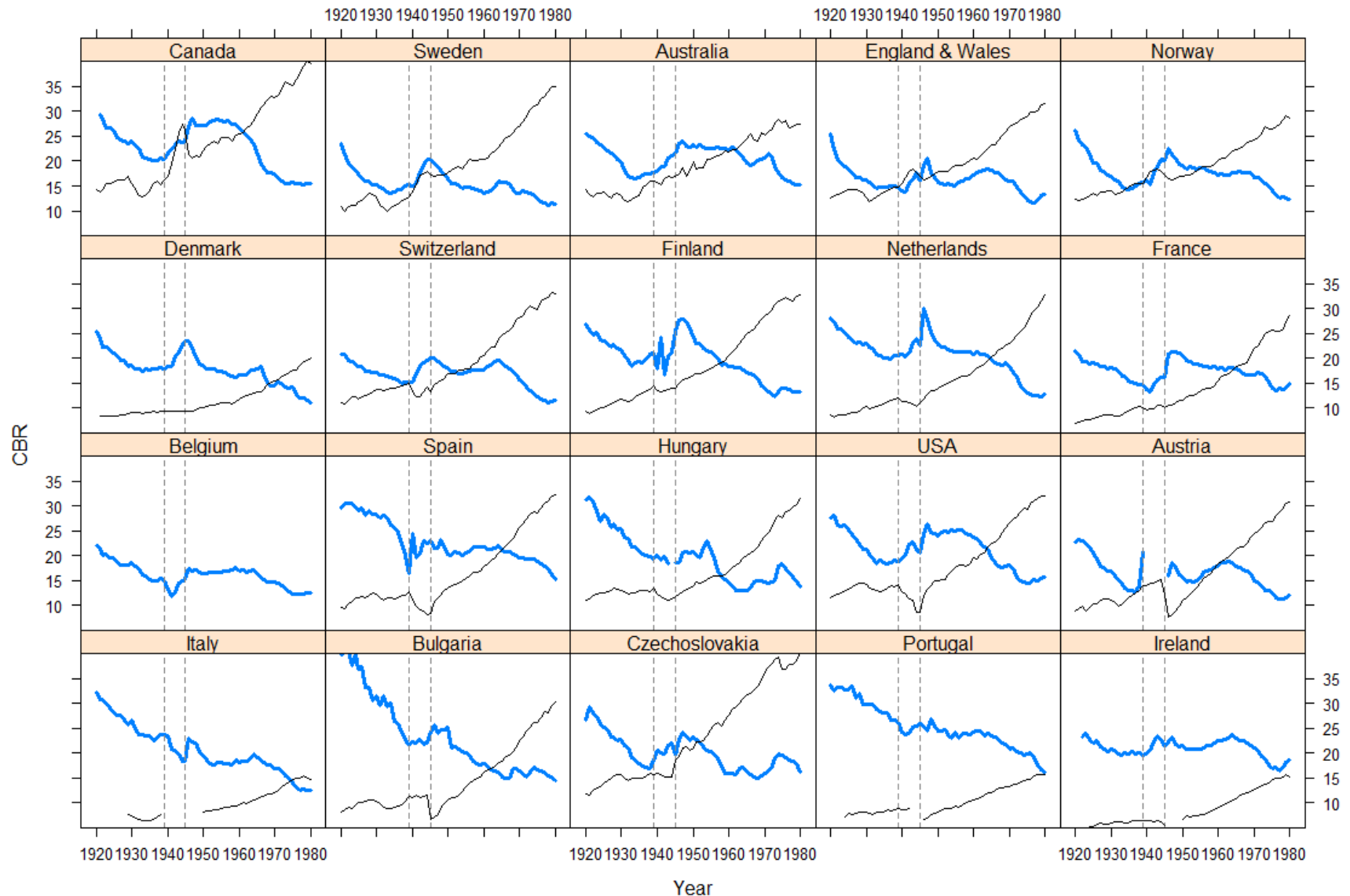
Cohort TFR 1900-1950



Explaining the Baby Boom: 2: post war economic boom



2. GDP growth (black line) and the Baby Boom (blue line)



GDP growth and the Baby Boom

- Results from panel models with lagged effects of GDP growth:
 - During period 1921-45: small positive effect of GDP growth during past year on CBR in current year
 - During later period: if anything, a negative effect of GDP growth on CBR
 - Role played by GDP growth is inconsistent and marginal at most (can explain only 5% of change in CBR)

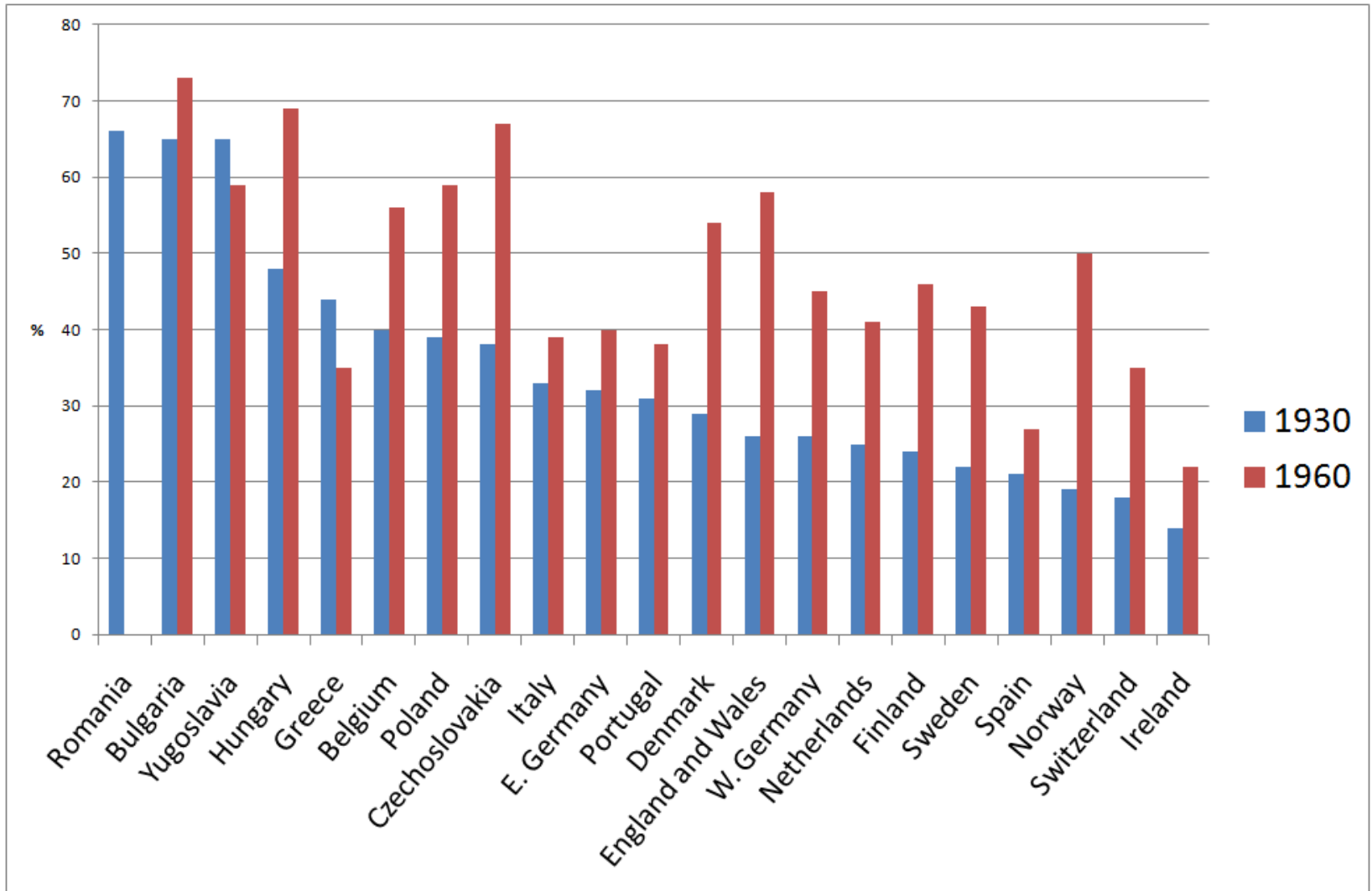
3: Rising Nuptiality



Wedding of Princess Elizabeth and Philip, Duke of Edinburgh, 20 November 1947

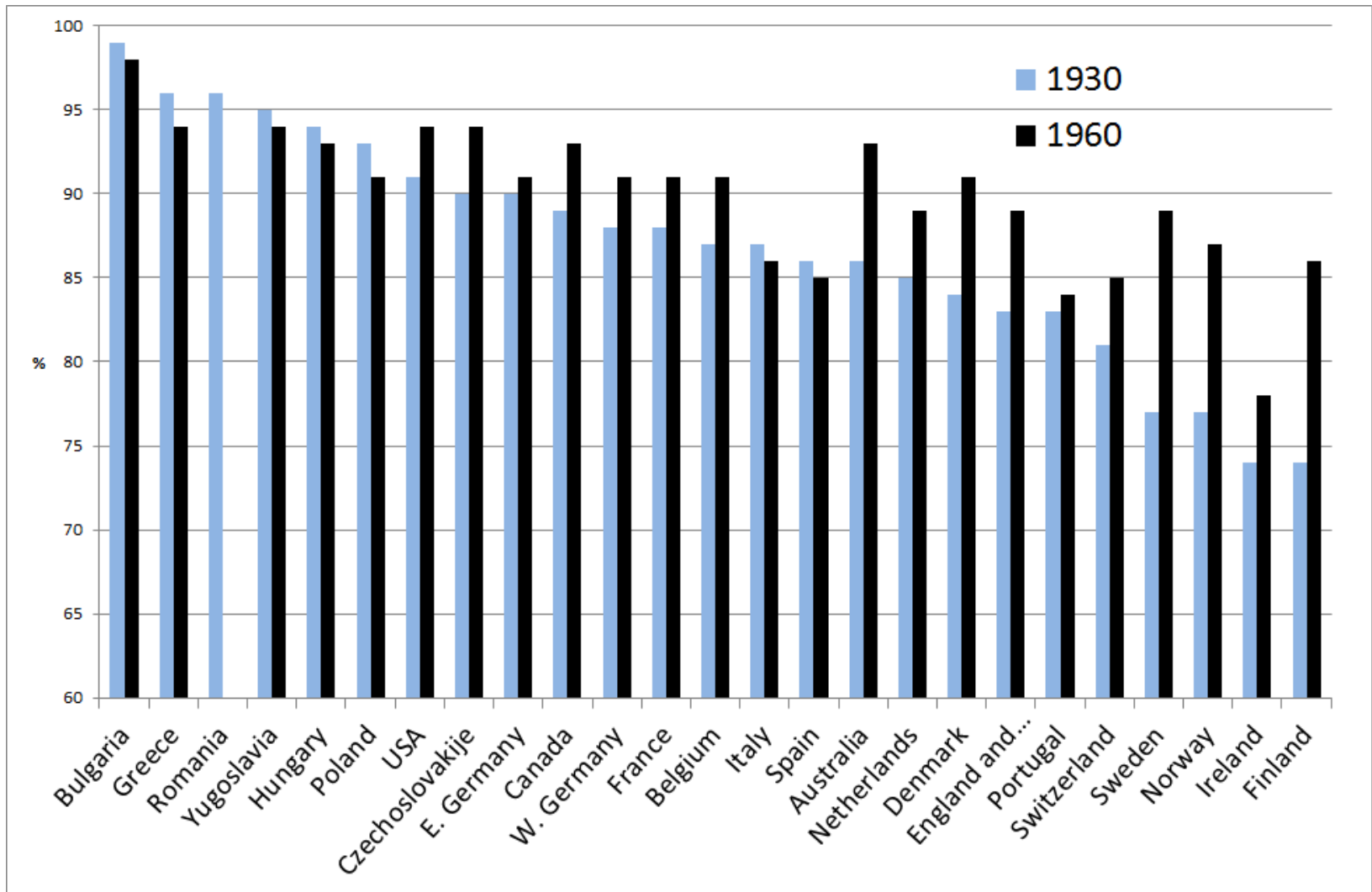
3: Rising Nuptiality

% ever married women aged 20-24



3: Rising Nuptiality

% ever married women aged 45-49



Rising nuptiality and total fertility

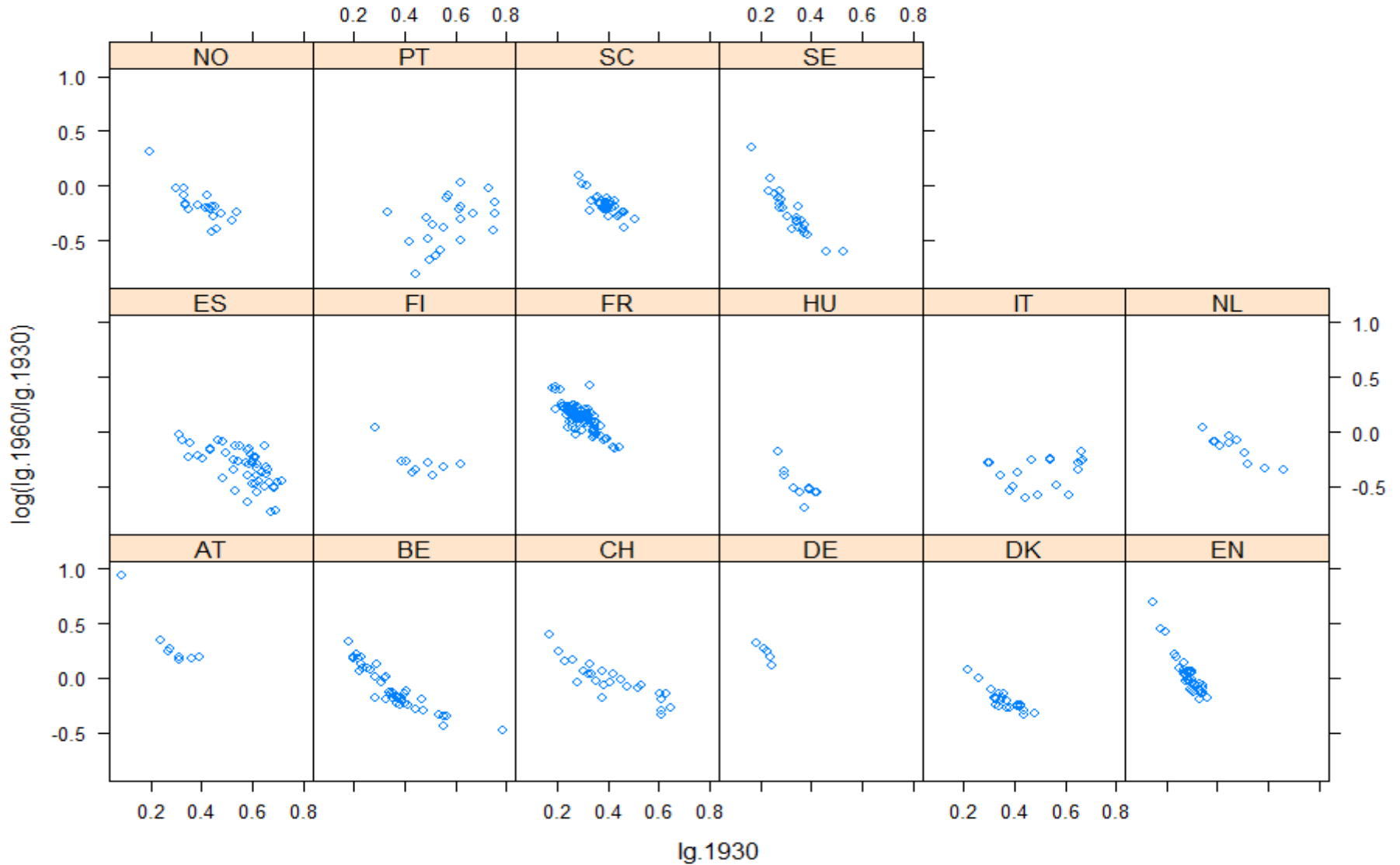
- 1) “**Composition** effect”: Rising % marrying → marital fertility rates apply to more people
- 2) “**Heaping** and duration effect”: lower age at marriage → additional cohorts marry during a given year → the number of recently married people goes up
- 3) “**Exposure** effect”: length of exposure to (socially sanctioned) chance of conception goes up; given imperfect contraception, this will affect TFR even if intended family size remains constant; should be visible at higher marriage durations

We need age, duration, and parity-specific analysis; is possible based on individual level census data

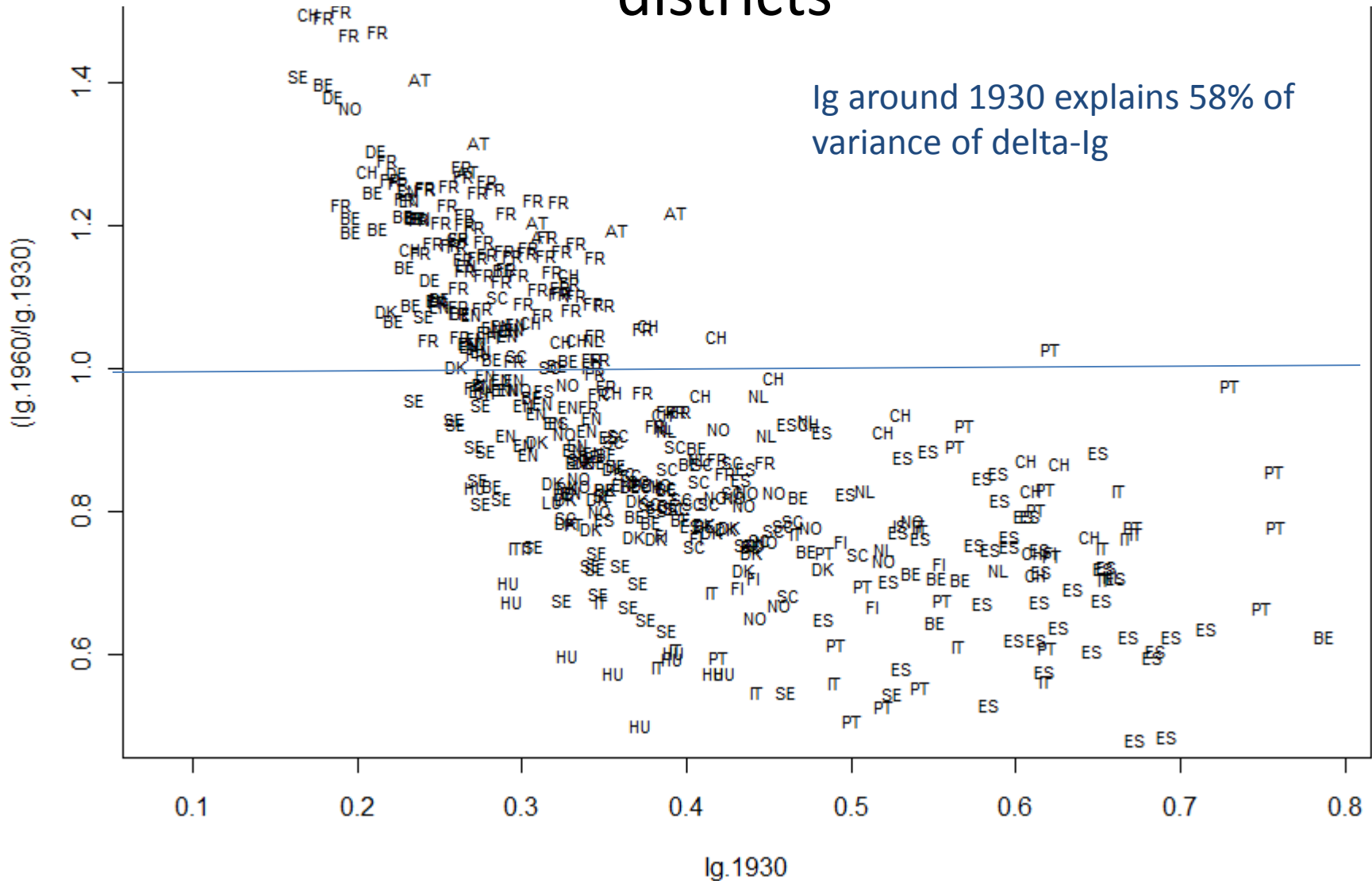
Hypothesis: inefficient contraception

- Rising cohort and period total fertility can partially be explained by the fact that
 - Nuptiality continued to go up
 - The extent of control over marital fertility had reached its limits given the inefficient contraceptive methods“Power of the pill” → baby bust
- Preliminary checks:
 - was the rise of marital fertility strongest in regions where marital fertility had already reached very low level?

Change in Marital Fertility (Coale index I_g) in provinces of some Western Countries, 1930-1970



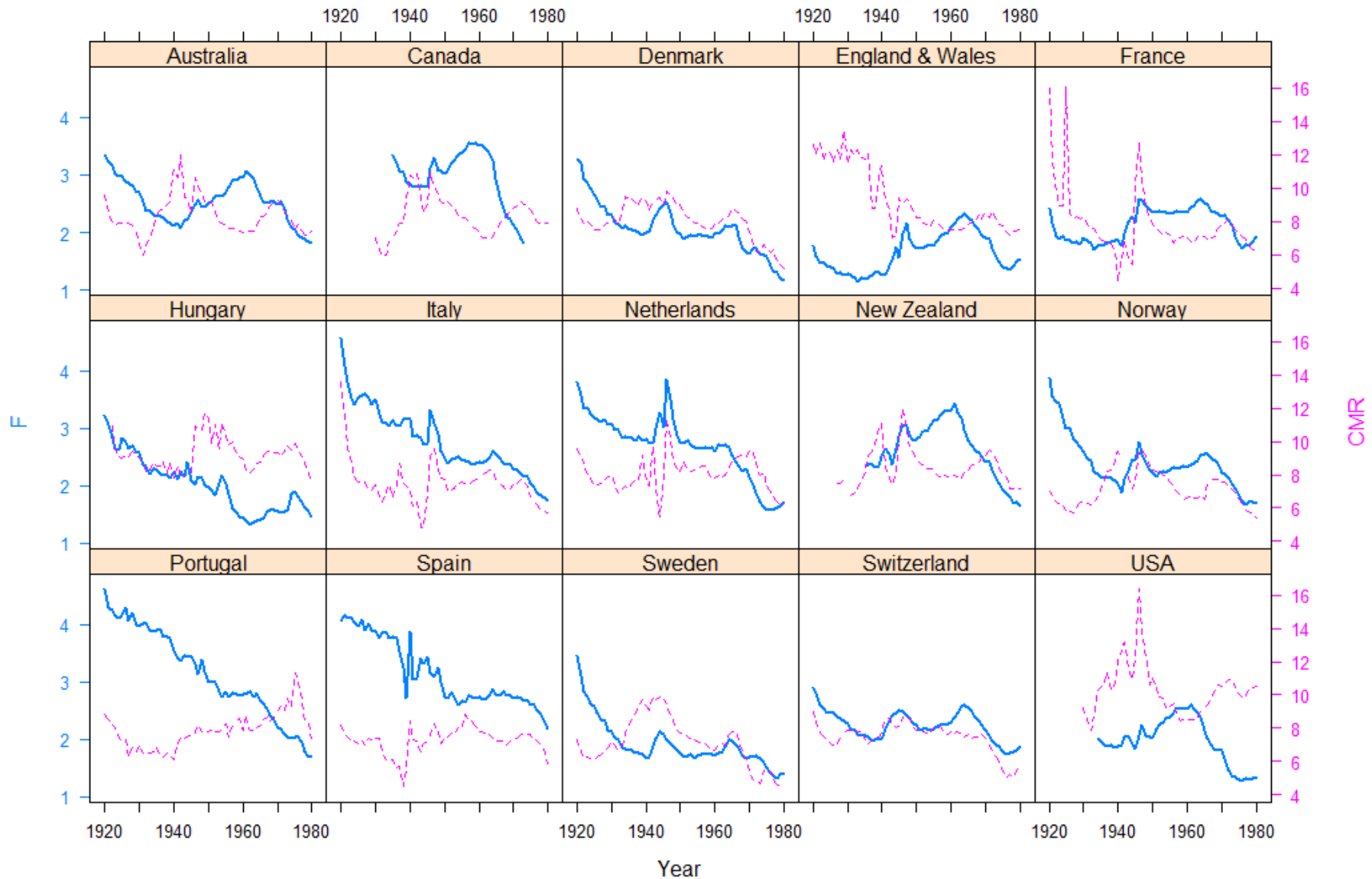
Change in marital fertility Ig between 1930 and 1960 by level of Ig in 1930, Princeton EFP districts



4: « La famille nombreuse »



4. F-index of marital fertility (left axis) and crude marriage rates (right axis)



Economic explanations

- Most cited are: Easterlin 1961, Butz & Ward 1979, Greenwood et al 2005, Doepke et al 2007:
 - All published in *American Economic Review*
 - They are all rather unilateral and tailored to the US experience

1. Easterlin: Relative Income Hypothesis

Argument:

- Material **aspirations** are built up during the childhood years
- People who grew up during the Great **Depression** had low material aspirations
- After the war, these cohort reached adulthood in times of economic **boom**
- So their income **relative** to their consumption aspirations increased
- They responded with **raising** their demand for children

1. Easterlin: Relative Income Hypothesis

Problems:

- many of the parents who made the baby boom did not grow up during the Depression
- Little support has been found for the Easterlin hypothesis outside the United States (Wright 1989)
- Macunovich (1998; 1999) argues that the concept of relative income is often not adequately measured

2. Butz and Ward 1979: relative wages of women

Argument

- During the baby boom, wages of women were low compared to wages of men.
- So the gains to marriage were high and the opportunity costs of having children were low
- At the same time, the wages of husbands were rising. This generated a positive income effect on fertility.

2. Butz and Ward 1979: relative wages of women

Problem

- Why was there no positive income effect on fertility in the period **before** the baby boom?
- 19th century couples pioneering family size limitation were typically found in relatively **high income** circles of bourgeois families.
- These were typically breadwinner families, with the **wife staying at home** and the husband working out for pay

3. Greenwood et al. 2005: household technology

Argument:

- the diffusion of new **household technology** helped women to run their households in much less time than before
- This lowered the **time cost** of having children



3. Greenwood et al. 2005: household technology

Problem:

- Studies show that parents spend more time on child rearing than ever before

4. Doepke et al 2007: crowding out of women in labor force

The argument:

- Second World War brought large positive **shock** on demand for female labor
- Exogenous boost in **female employment** had opposite consequences for young and old women:
 - **Older** generations who worked already during the war, retained their labor market position afterwards
 - **Younger** women faced large competition in post-war labor market → lower demand for labor, lower wages, crowded out
- These younger generations ran towards marriages and babies instead

4. Doepke et al 2007: crowding out of women in labor force

Challenges/problems:

- Unwarrented assumption that labor market is driving the appetite for marriage, rather than the other way arround → we need sounder causal analysis
- The theory cannot explain the recovery of fertility starting before and during the War
- (In their detailed argument, the assumption that more children would require getting married at an earlier age than before place a critical role (while later stopping would also work))

Conclusions: what we know

1. Usually, recovery of fertility started **before** the end of Second World War
2. Postponement – catching up explain at most a minor part of it
3. Minor and inconsistent relationship between trends in economic growth and birth rate:
 - negative in 19thC,
 - positive towards beginning of World War II
 - negative again after World War II
4. Major role for nuptiality: baby boom = to a large extent a marriage boom
5. Marital fertility tended to recover most where marital fertility was (very) low before the war

Conclusions: what we **need to** know

1. How can we explain the **marriage boom**? Why was marriage more popular than ever?
2. Broader **historical** and **geographic** perspective: linker with wider proces of demographic transition (time series should not start in 1945)
3. We need to take the role of **culture** more seriously if we want to understand the marriage and baby boom: religion? Anti-modernist reaction? ...?
4. What role did pro-natalist **policies** play?
5. How can we understand the unexpected revival of **marital fertility**. We need more detailed studies by age, period, cohort, parity, and SES
6. The role played by **social differences** at the micro-level, and new opportunities for women, e.g. in terms of education as well as on the labor market