Does Postponement Explain the Trend to Later Childbearing in France?

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International Seminar on
Postponement of Childbearing in Europe,
VID – Università Bocconi – IIASA, Vienna, 1-3 December 2005

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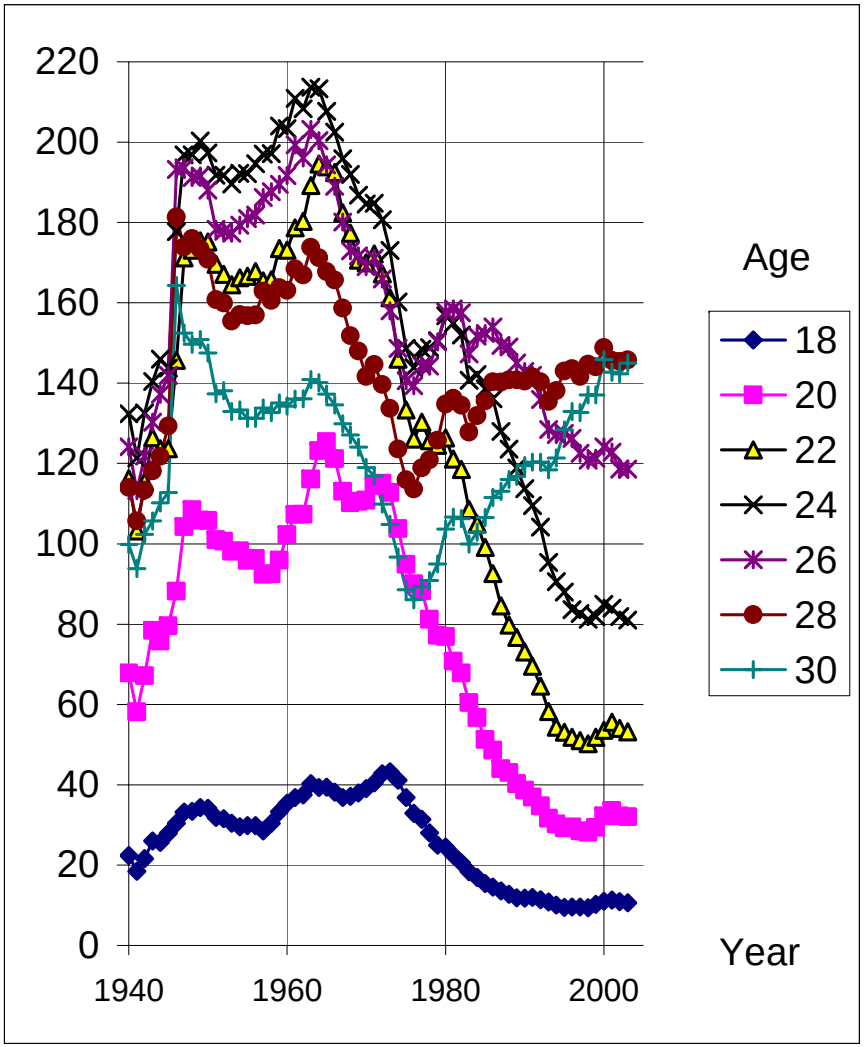
1) Sequence of events and behavioural process

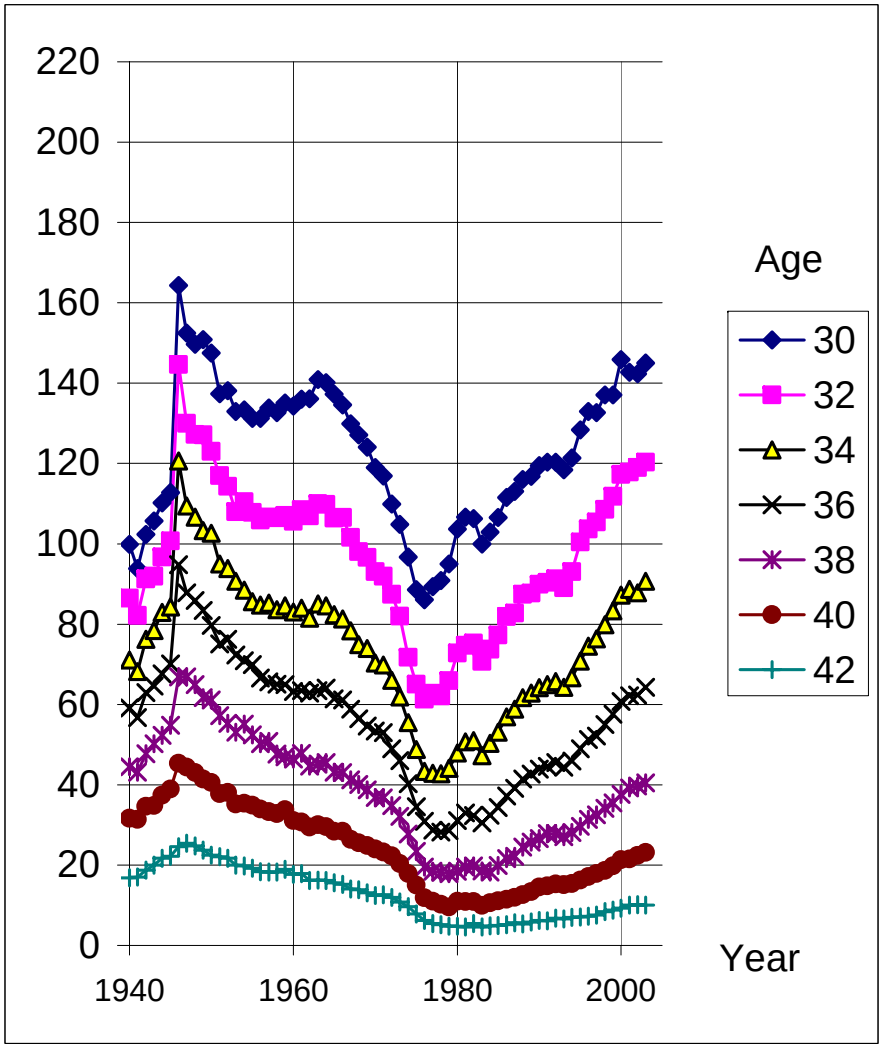
Behavioural process		**Statistical-demographic sequence of** A decline in rates occurs at younger ages. At older ages rates:	
		subsequently rise	do not later rise
Women/couples postpone childbearing		Catching-up. Example: wartime	"Postponed" births do not occur
Postponement does not occur	Other process in which declines in rates at younger ages are linked with rising rates at older ages	Example: a shift to older ages in the opportunities and incentives to have children that occurs over the medium-	
	No such process	Factors influencing trends at younger and older ages are independent	No postponement, no links between trends at different ages, no rise at older ages

2) Fertility trends in France

- Data
  - Civil registration data for age-specific rates
  - The Family history survey: a one-percent sample within the 1999 General population census. Parity-specific rates
- Age-specific fertility, from 1940 to 2003
  - The post-war baby boom
  - The end of the baby boom
  - The recent period
- Parity-specific fertility
  - First births rates by age

Age-specific fertility rates, selected ages, France, 1940-2003





Major trends: age-specific rates

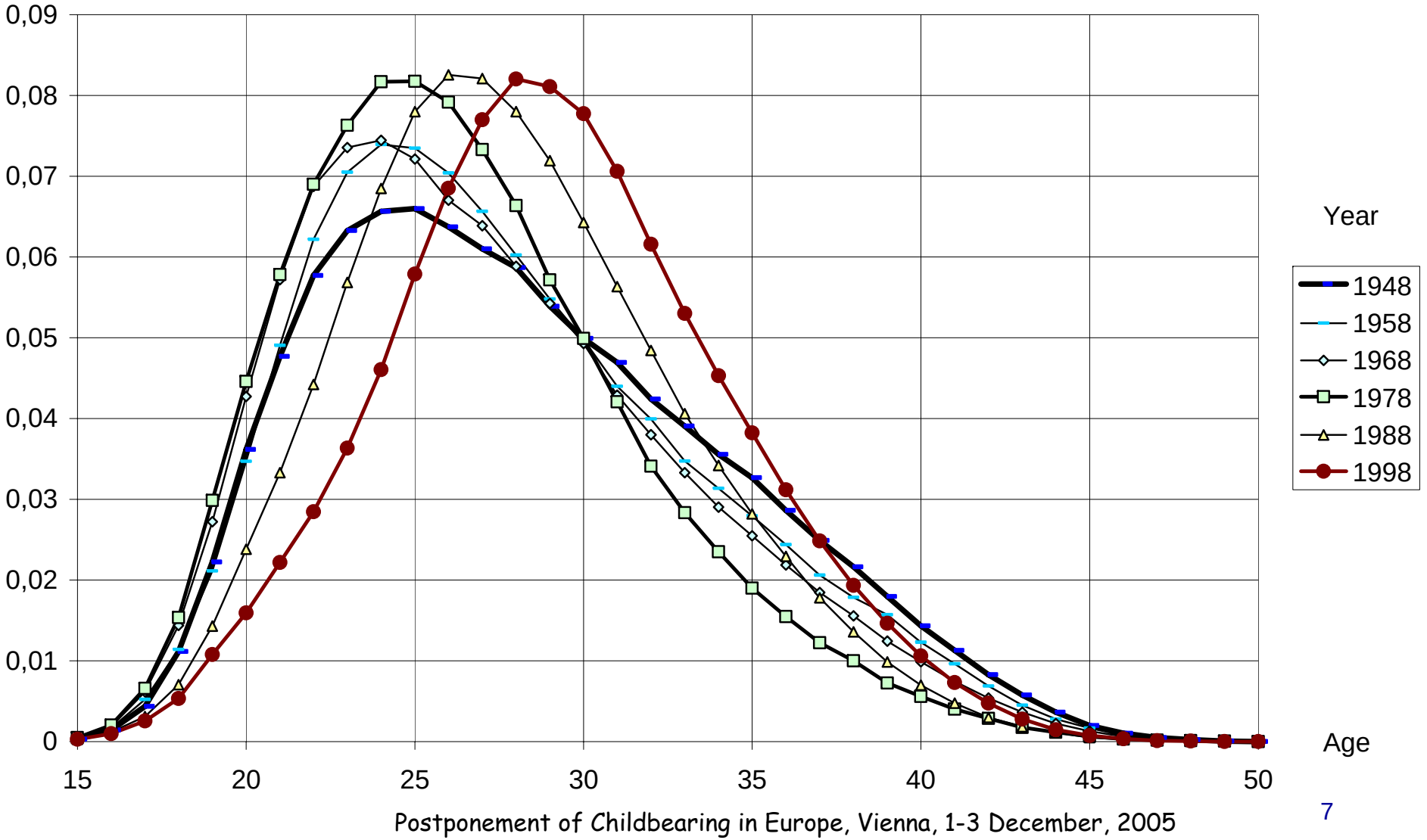
- The second half of the century can be divided in three main periods of time

  1) The baby boom
  - 1946-65: increase at young ages and decline at older ages
  - Advancement of births?

  2) The ending of the baby boom
  - 1965-1975: decline at all ages
  - Long range correlations

  3) The recent period
  - 1980-2000: decline at young ages, increase at older ages
  - Is that postponement?

Period age-specific fertility schedules (standardised to sum 1). France, selected years



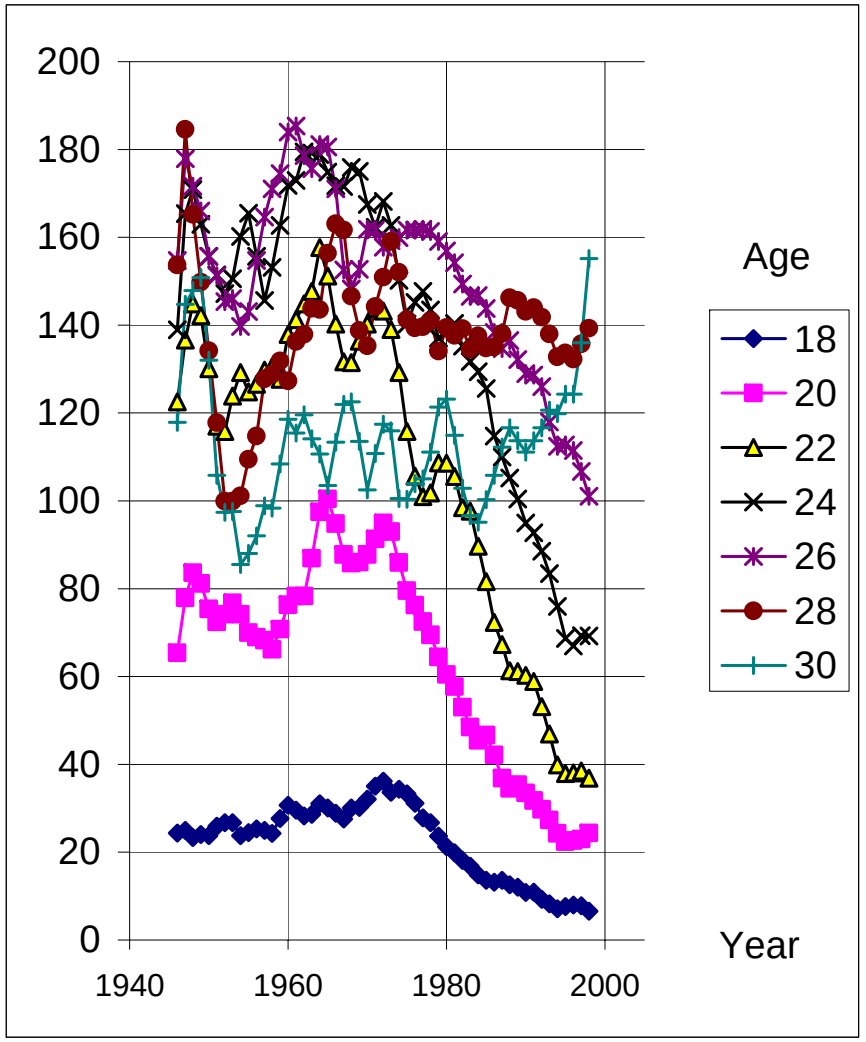
Major trends: parity and fertility timing

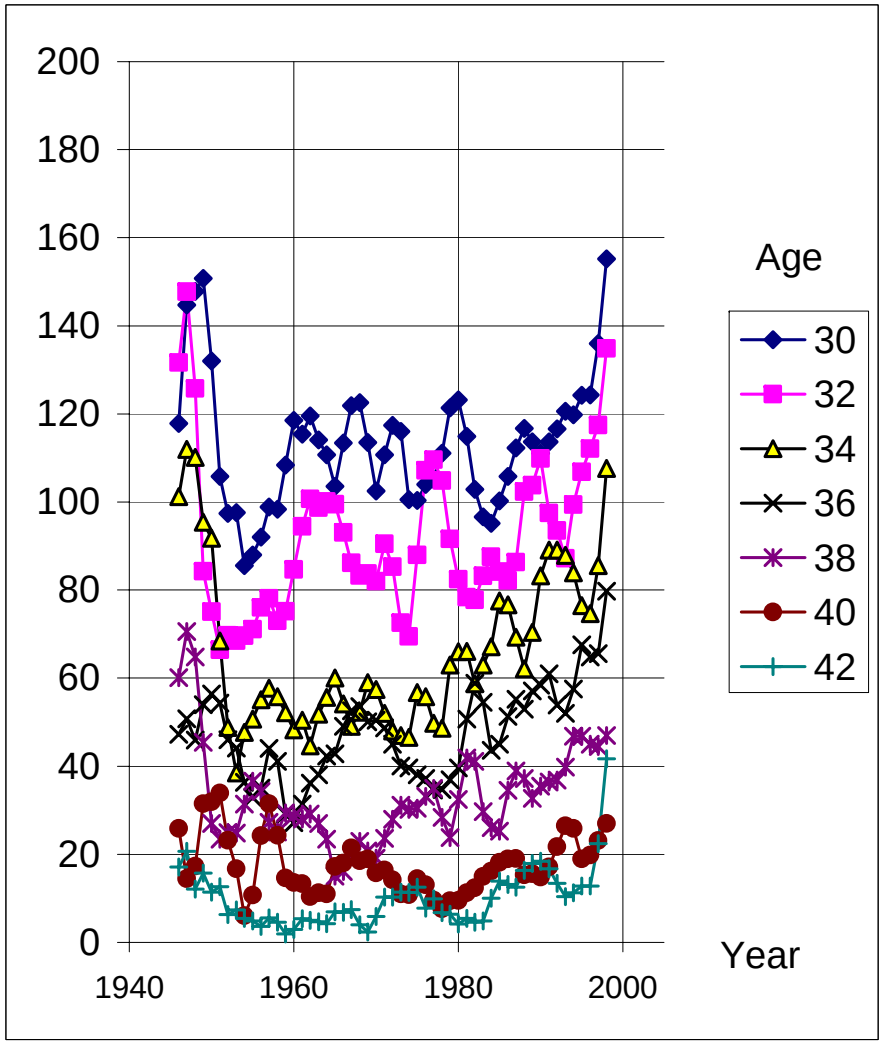
- During the baby boom:
  - High fertility for first births
  - Decline in high order births
  - Decline in the mean age at childbearing, and also in the variance of ages and number of children
- Current shift toward later ages
  - Shift of first births towards later ages
  - No major change in distribution by parity or duration between births
  - Increase in the mean age at first birth is the main feature of recent trends

First birth probabilities

- Parity-specific analysis is useful to understand the fertility processes
  - Stability in the recent period
  - First births by age
- Parity-specific rates are needed
  - Unconditional rates by birth order do not measure the actual behaviour of the groups at risk
  - Parity- and age-specific fertility rates are more appropriate
- Here only first births probability
  - Higher order births by age and/or duration since last birth
  - Simpler to analyse first birth rates by age
  - Major recent changes

Conditional first birth rates, selected ages, France 1946-98





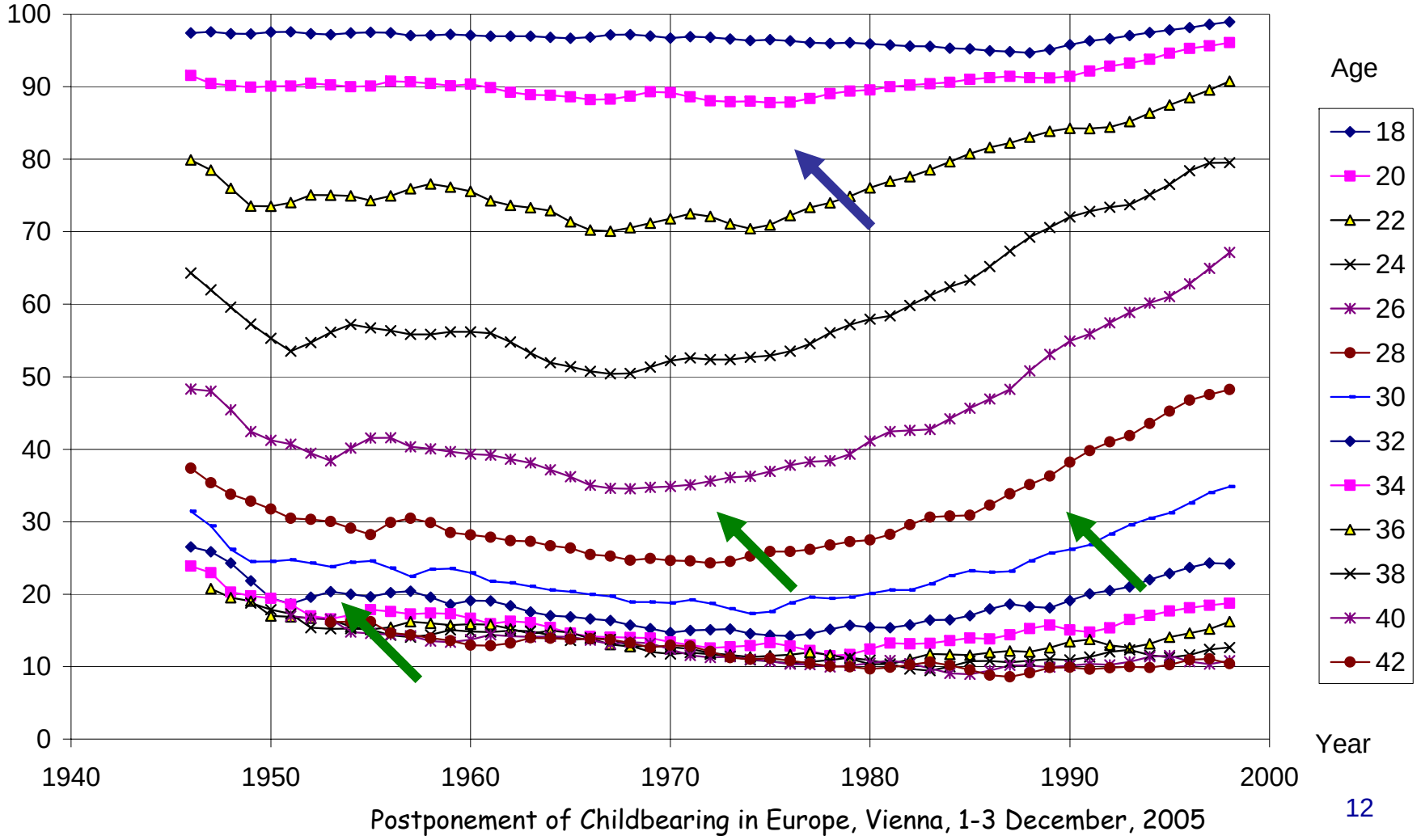
Major trends: first birth parity- and age-specific (conditional) rates

- The baby boom
  - High and unstable rates at young ages
  - Large increase at the end of the war; decline in the years 1946-55, new increase in the late fifties
- The end of the baby boom
  - 1955-1975: stability of fertility at young ages
  - Increase or stability at older ages
- The recent period
  - Large decline at young ages
  - Acceleration of the increase at older ages
  - Is that postponement of first births?

Proportion of childless women, selected ages, France 1946-98

: reversal (decrease in fertility)

: reversal (increase in fertility)



Major trends: proportion of childless women

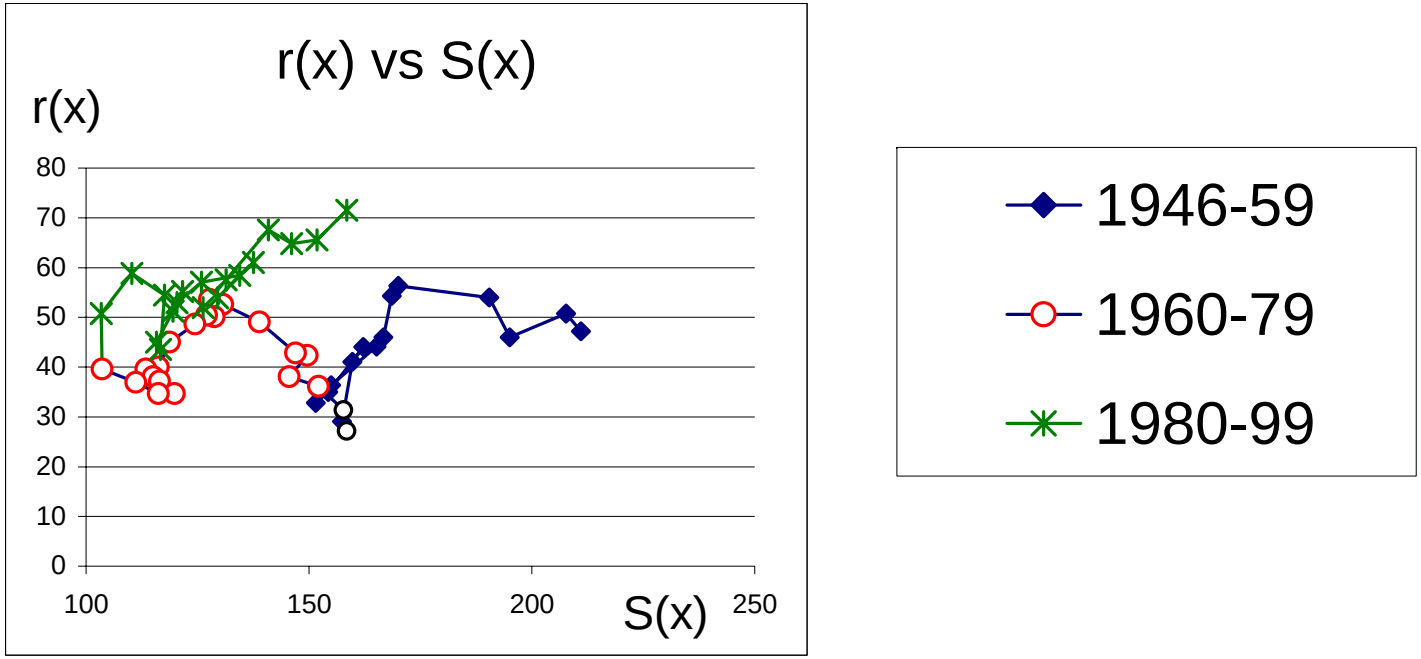
- 1946-1975
  - Decline in childlessness at all ages
- 1975-1998
  - Large increase in childlessness at young ages
  - Increase of fertility at older ages (at the same time or even before)
- No visible cohort-specific pattern dominating the trends
  - The decline of first birth rates begins in the mid 1970s
  - The increase at older ages begins earlier, after the end of the "post-war recuperation"

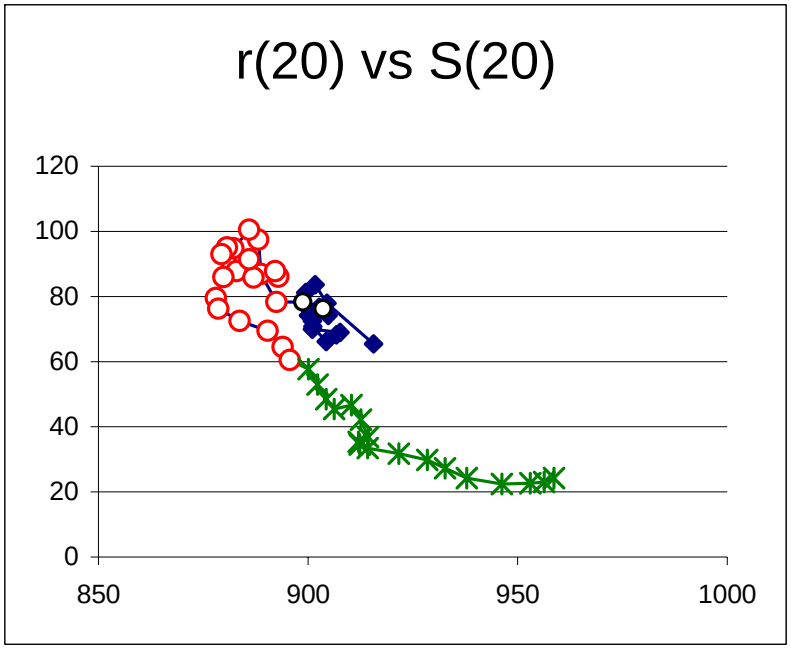
3) Is postponement occurring? Two predictions built upon the postponement hypothesis

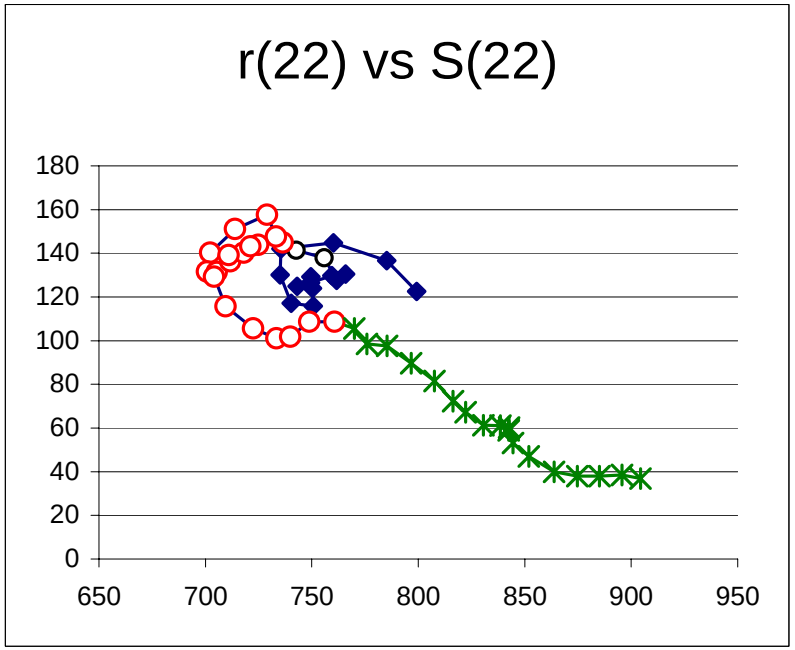
- A positive correlation between proportion childless and first birth rates
  - If women postponed before age x, the proportion childless S(x,t) is high
  - If women aged x “catch-up” “deferred” births, the first birth rate r(x,t) is high
  - Compare time series of S(x,t) and r(x,t) for many ages x
- A negative correlation between the change in the rates at age x, year t, on the one side, and the rates at age x+d, year t+d, on the other side
  - First differences d(x,t) = r(x,t) – r(x,t-1)
  - Negative correlation between d(x,t) and d(x+d,t+d), lagged differences in the same cohorts
  - Several lags, short term (individual postponement)

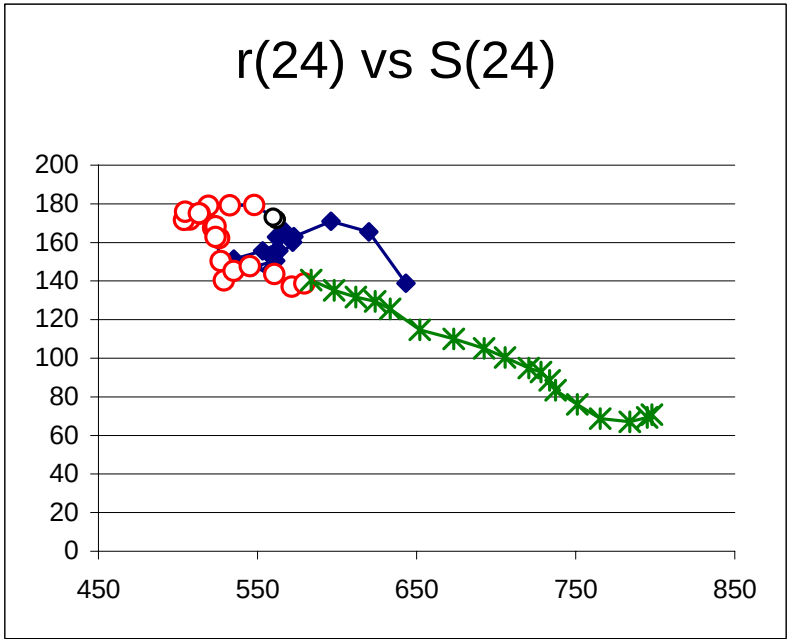
First prediction

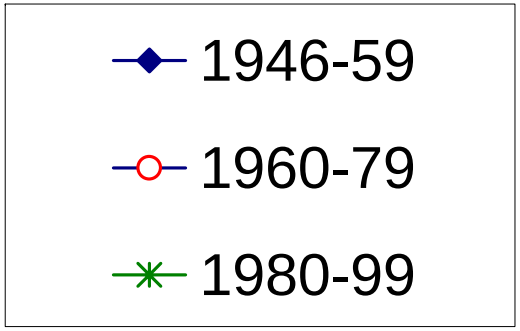
- For higher ages, S(x,t) and r(x,t) positively correlated
  - Proportion childless S(x,t) on the horizontal axis, first birth rate r(x,t) on the vertical axis, both expressed in “per 1000”
  - Time t from 1946 to 1998, divided into three periods: 1946-59 , 1960-79 and 1980-98
  - Ages x from 20 to 38

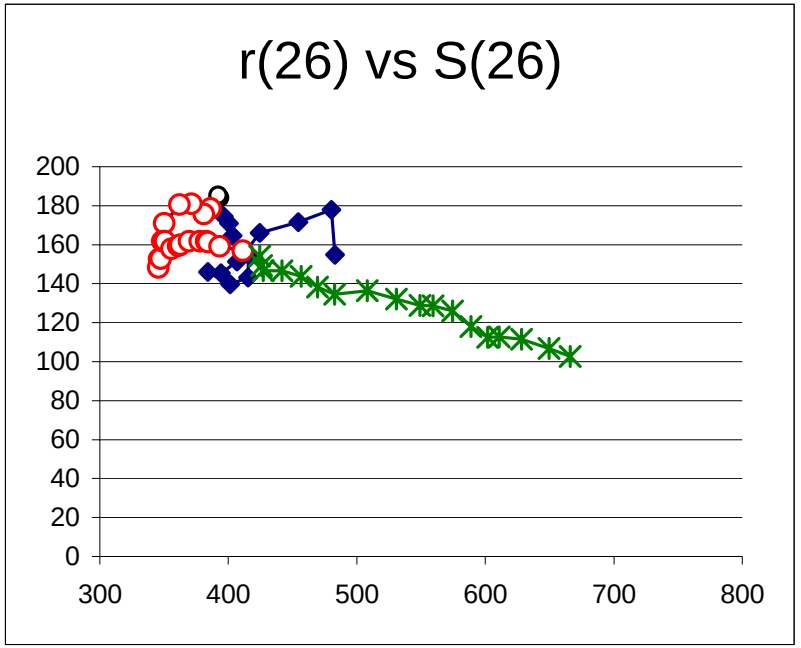


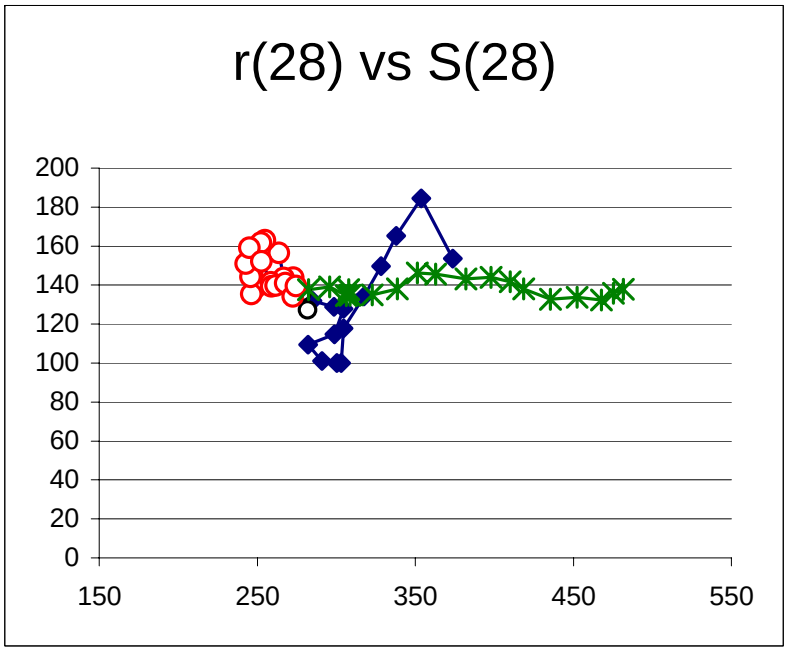

r(20) vs S(20)
120
100
80
60
40
20
0
850
900
950
1000

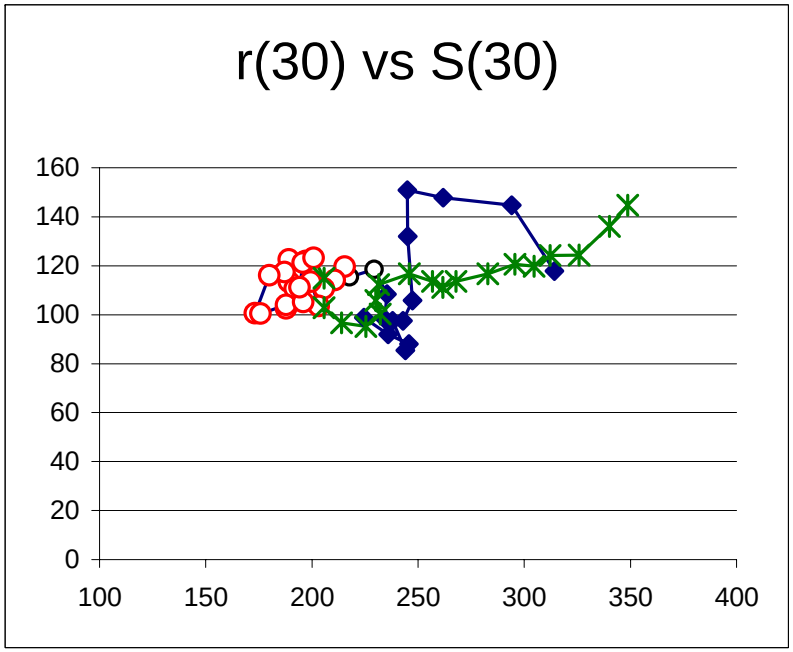

r(22) vs S(22)
180
160
140
120
100
80
60
40
20
0
650
700
750
800
850
900
950

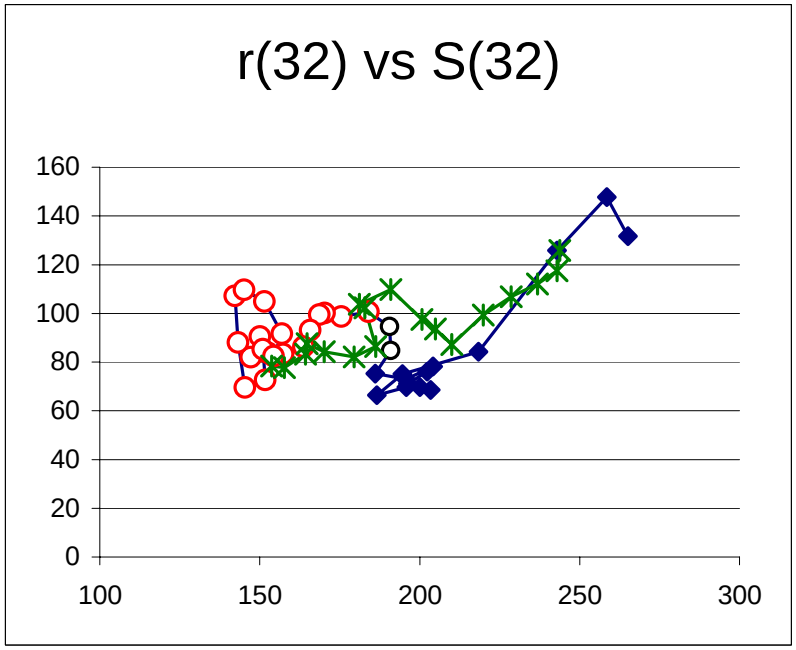

r(24) vs S(24)
200
180
160
140
120
100
80
60
40
20
0
450
550
650
750
850

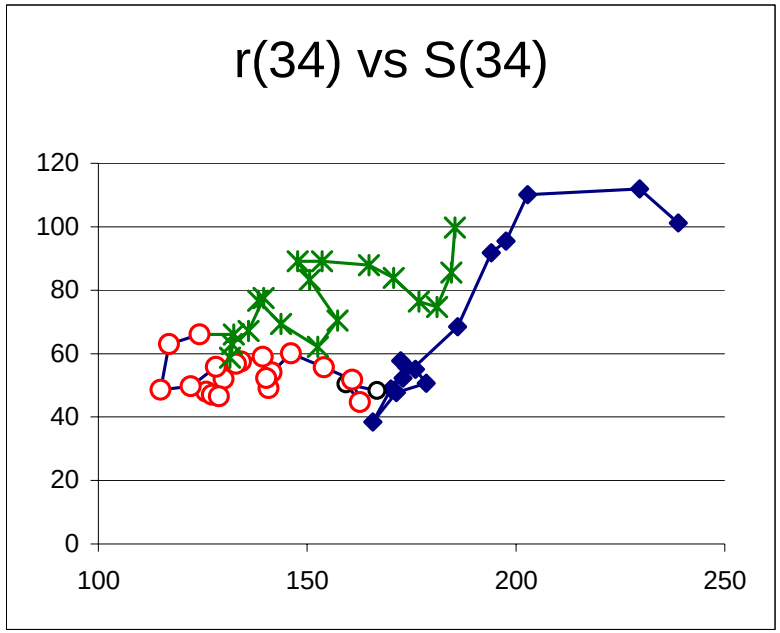

1946-59
1960-79
1980-99

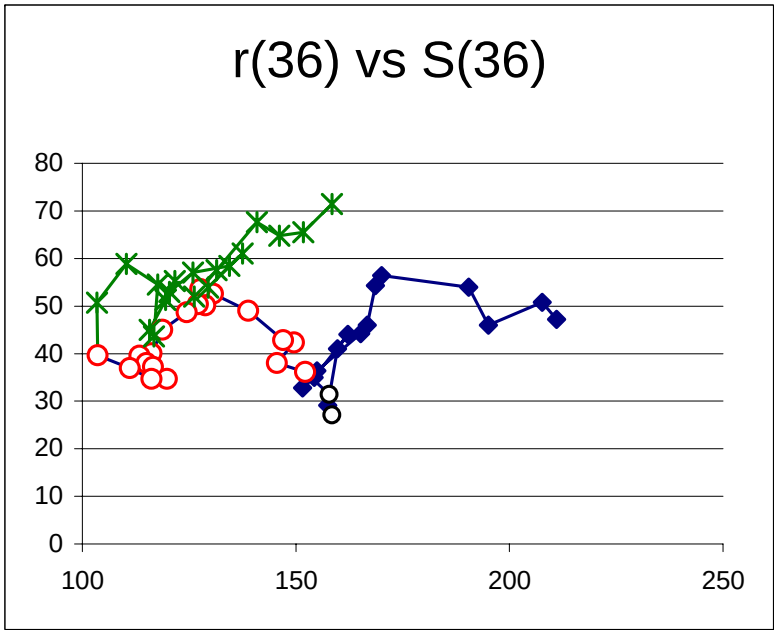

r(26) vs S(26)
200
180
160
140
120
100
80
60
40
20
0
300
400
500
600
700
800

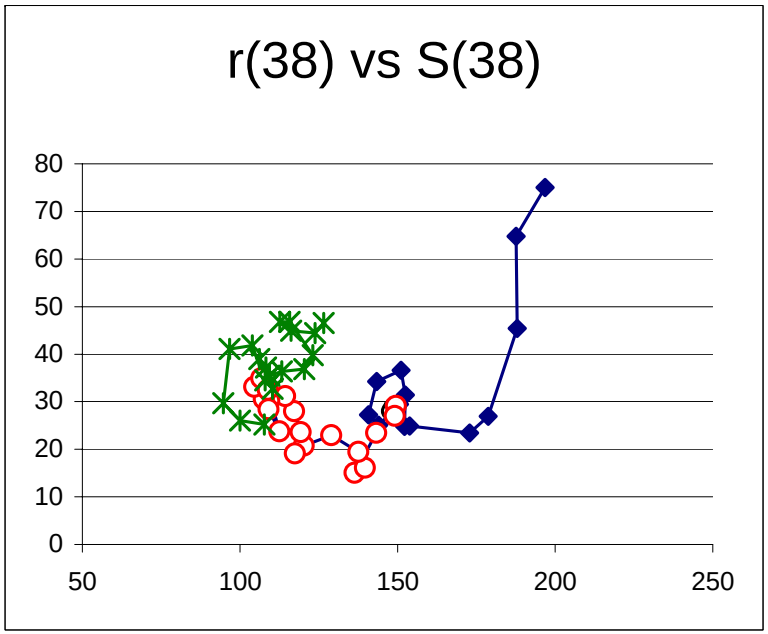

r(28) vs S(28)
200
180
160
140
120
100
80
60
40
20
0
150
250
350
450
550

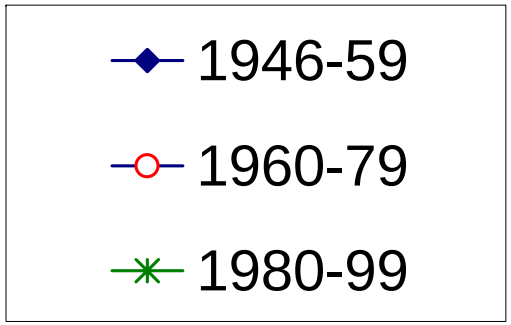

r(30) vs S(30)
160
140
120
100
80
60
40
20
0
100
150
200
250
300
350
400


r(32) vs S(32)
160
140
120
100
80
60
40
20
0
100
150
200
250
300


r(34) vs S(34)
120
100
80
60
40
20
0
100
150
200
250

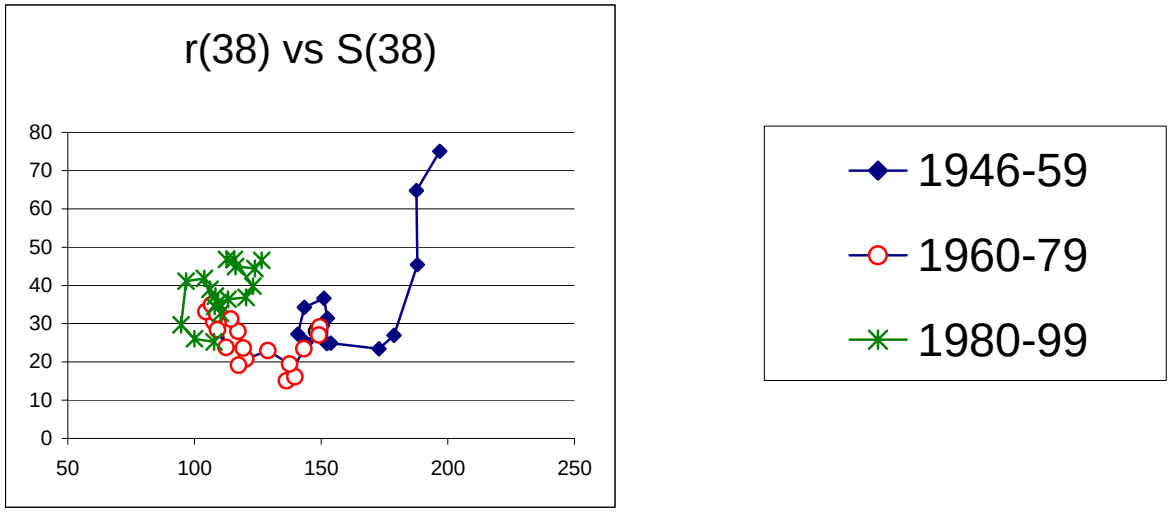

r(36) vs S(36)
80
70
60
50
40
30
20
10
0
100
150
200
250


r(38) vs S(38)
80
70
60
50
40
30
20
10
0
50
100
150
200
250

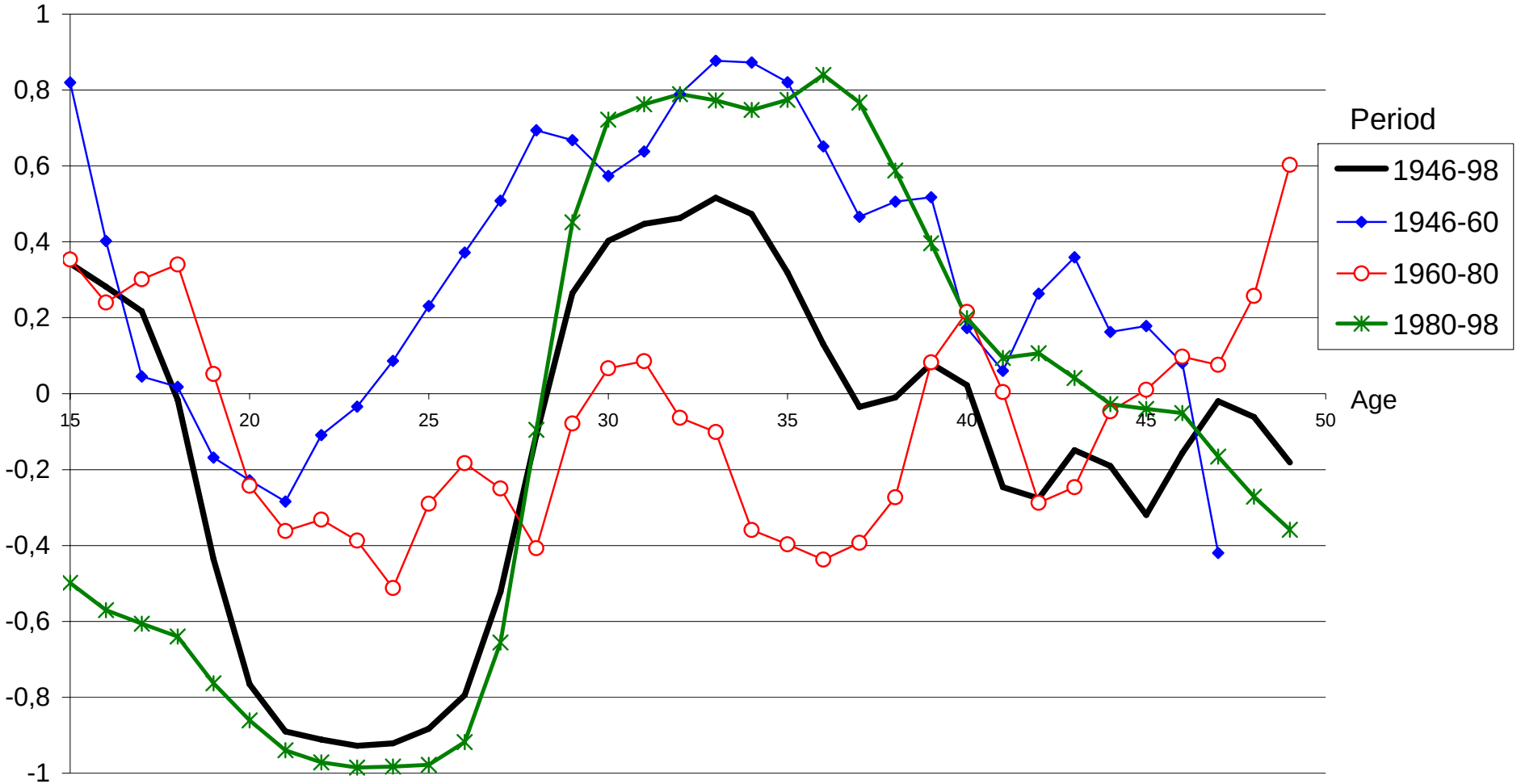

1946-59
1960-79
1980-99

Main results

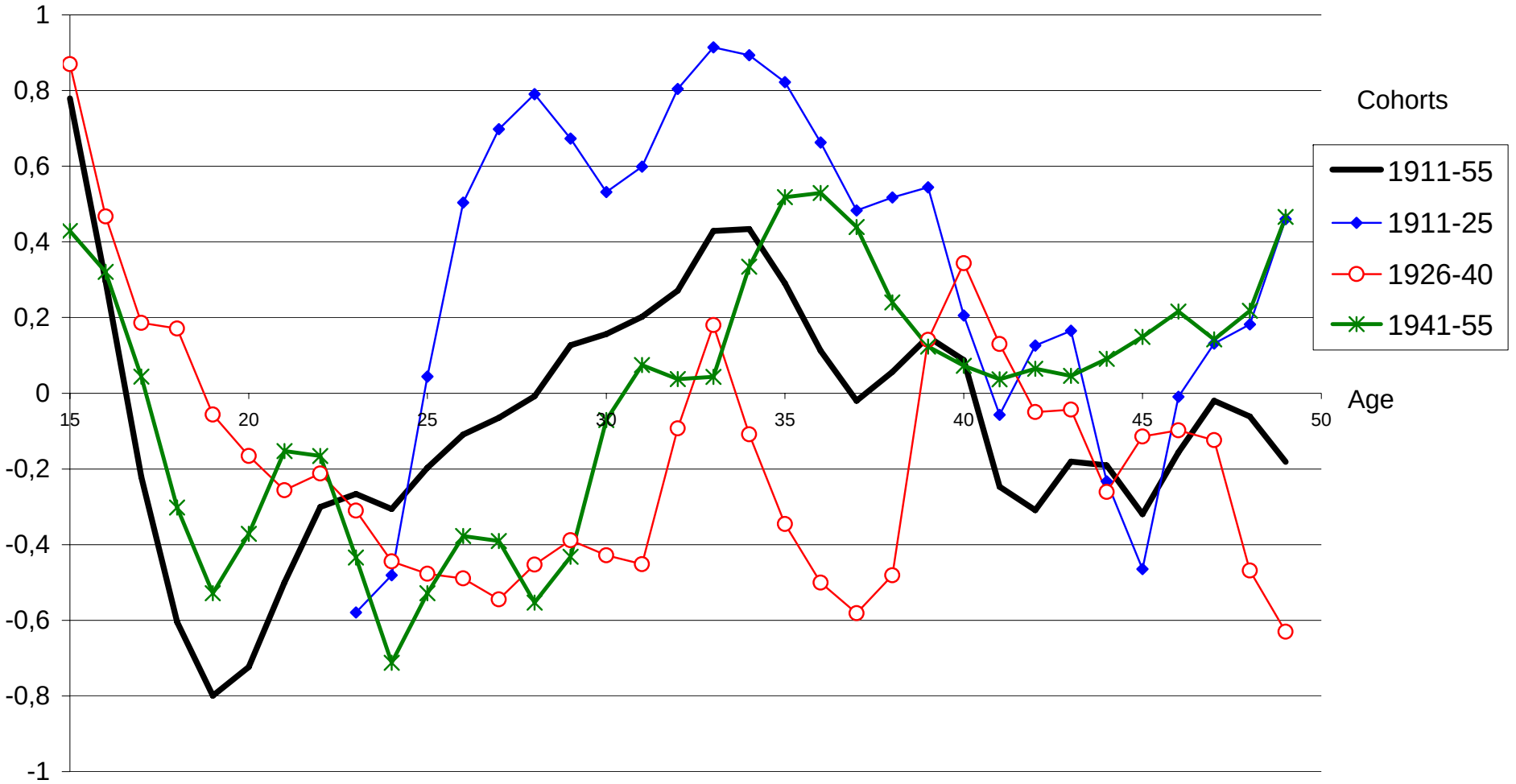
- Such positive correlations for ages above 30
  - For ages before 28 we see a negative correlation between S(x) and r(x): all ages
- There is a positive correlation at ages above 30, during periods 1946-55 and 1980-98
  - 1946-55: both S(x,t) and r(x,t) decrease: “advancement”, end of “post-war recuperation”
  - 1980-98: both S(x,t) and r(x,t) increase: more childless women at older ages AND increase in their fertility
  - But no such correlation during the period 1955-79: less childless women and no decrease in their fertility



Correlations between childlessness S(x,t) and first birth rates r(x,t), years 1946-98



Correlations between childlessness S(x,t) and first birth rates r(x,t), cohorts 1911-55 (years 1946-98)



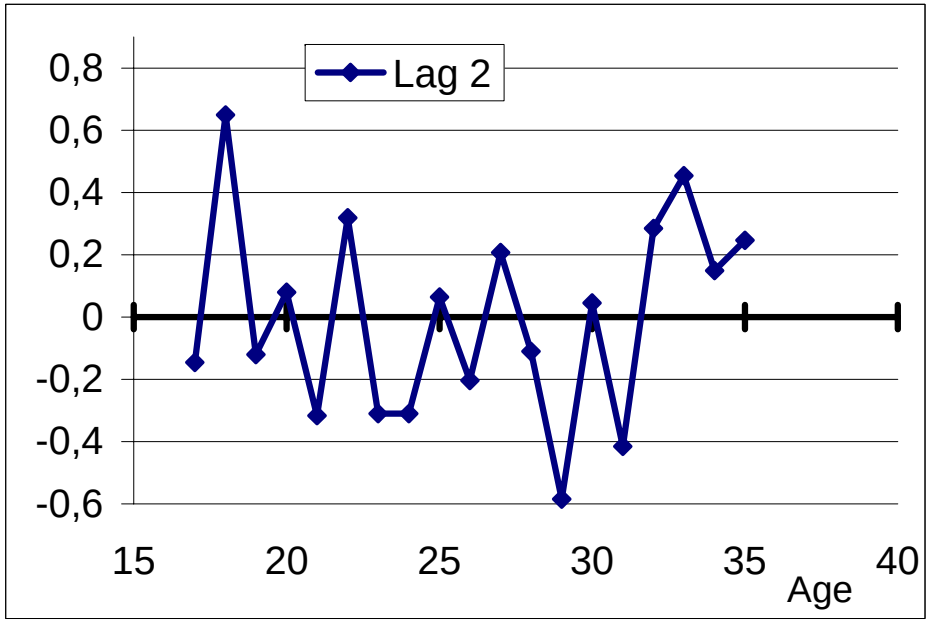
Results and discussion

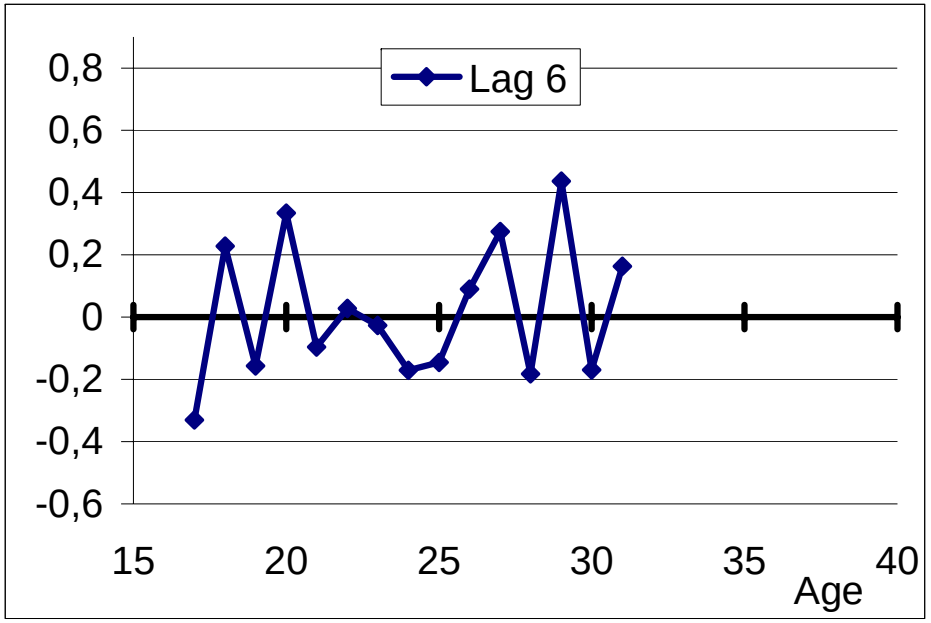
- Some evidence of negative feed back in recent years, but these compensative movements do not always occur

- There is no general feature of the rates that could allow us to predict that the current increase in proportion childless at age 30, due to the recent decline in the rates at young ages, will be followed by an increase in fertility after the age of 30
  - Room for future research

Second prediction

- A negative correlation between the change in the rates at age x, year t, on the one side, and the rates at age x+d, year t+d, on the other side
  - First differences d(x,t) = r(x,t) – r(x,t-1)
  - Negative correlation between d(x,t) and d(x+d,t+d)
  - Several lags, short term (individual postponement)
  - Here d=2 [d(x,t) and d(x+2,t+2)] (left) and d=6 (right)





Results and discussion

- No evidence of negative correlation for lags 1-6

- There could be a negative correlation at longer lags, if postponement is spread across several ages
- But in that case correlations cannot be identified as the consequence of individual postponement

5) Conclusions

- Postponement could be identified retrospectively, but not prospectively
  - Postponement does not necessarily occur, as cohort fertility is not constant
- Postponement without catching-up is not postponement
- Statistical link between decline at young ages and increase at old ages do not prove that postponement occurs
  - Several other processes may occur
  - Some scenarios can be built to explain the current trends

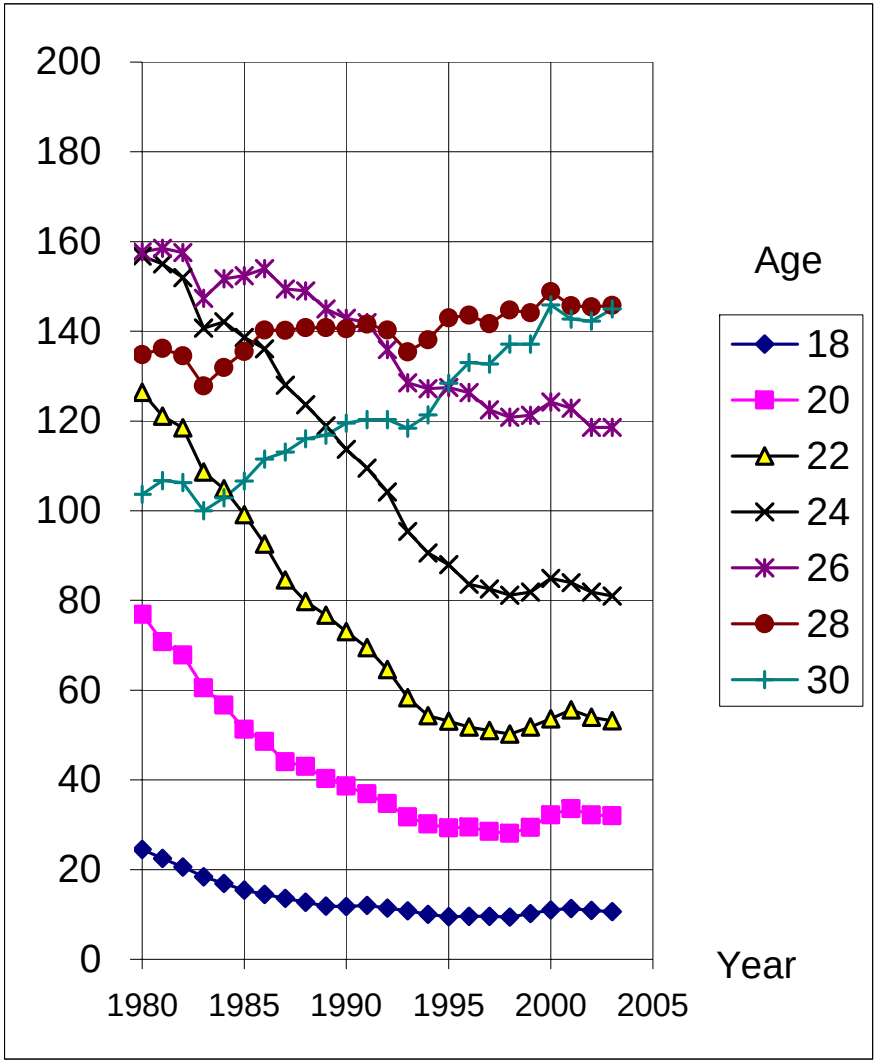
Five possible scenarios (1 / 2)

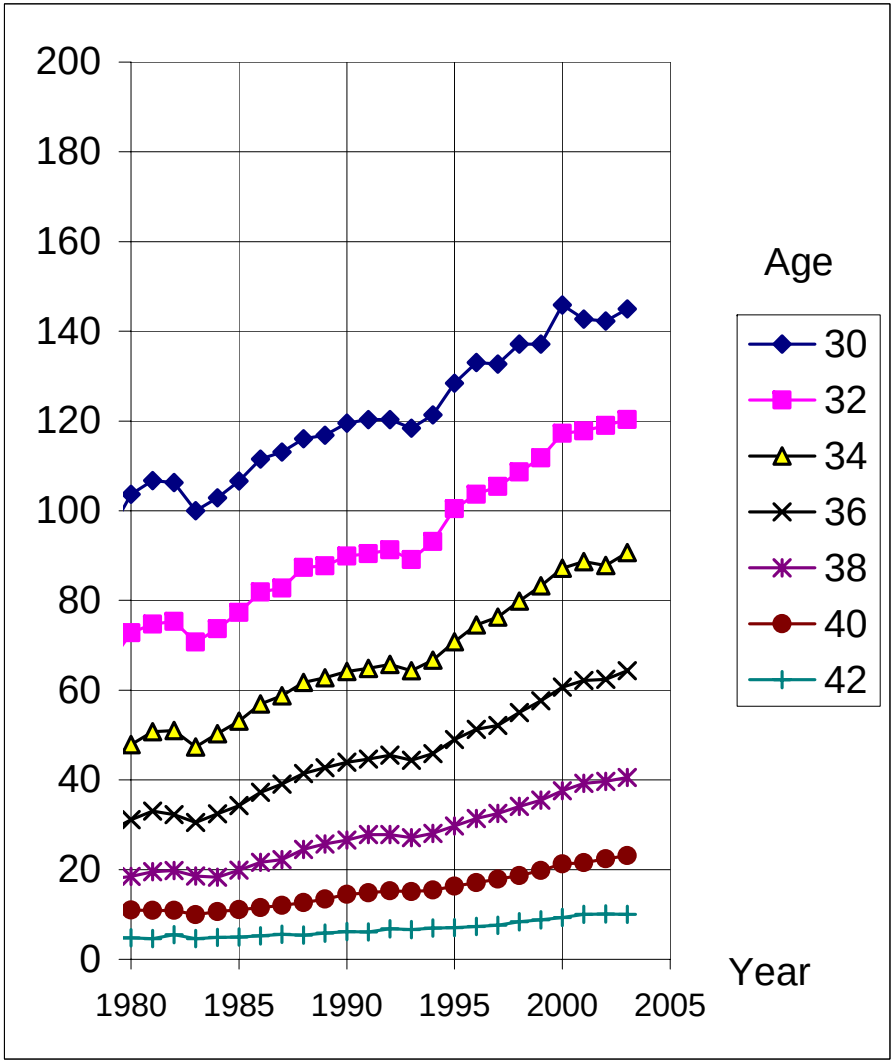
- 1) Postponement
  - A cause leads young women to reduce their fertility and plan (firmly, insensitive to future conditions) to have births in the long term
- 2) Potential postponement
  - A cause leads young women to reduce their fertility and plan to have children in the future, but the plans are sensitive to future conditions
- 3) Decline of fertility at young ages
  - A cause leads young women to reduce their fertility, without any link with future plans

Five possible scenarios (2 / 2)

- 4) Unrelated decline of fertility at young ages and increase at old ages
  - A cause leads young women to reduce their fertility, without any link with future plans; another unrelated cause increases fertility at older ages
- 5) The childbearing ages change
  - The entire structure by age of incentives to fertility changes so that the age pattern of childbearing shifts to older ages
- And a very last question:
  - What can we say after the stabilization of fertility at young ages in the late 1990s?

Is postponement helpful to foresee the consequences of the recent stabilization of fertility at ages under 25? Open question…





Thank you

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