Decrease in fertility also confirmed from a cohort perspective

Sum of age-specific fertility rates: cross-sectional and cohort view

- Red line: completed fertility rate
- Blue line: total fertility rate

- Promised pro-family measures never implemented
- Pro-family measures implemented

Fertility decrease and a rise in the age of mothers at childbirth

The lowest total fertility rate in the Czech Republic (1,13) was recorded in 1999.

- For the first time in the history of fertility in the Czech Republic (the Czech Lands) there were fewer than 1,5 live births per woman for an extended period of time (between 1995 and 2005 the figure was even lower - below 1,3); at present, 1,5 is the average total fertility of the European Union.

- The long-term trends of both basic general indicators of women’s fertility, i.e. total fertility rate (the average number of live-born children per woman of reproductive age within a calendar year) and completed fertility rate (the average number of live-born children per woman of reproductive age within a given generation of women) indicate that the recent changes signify a clear turning point in reproductive patterns and they also lessen the likelihood that there will be a return to the pattern of simple reproduction, i.e. to the average of two children per woman of reproductive age.
After a short and moderate baby-boom, oscillations in TFR have been related to actual population climate

<table>
<thead>
<tr>
<th>Year</th>
<th>TFR</th>
<th>Number of live births</th>
<th>Year</th>
<th>TFR</th>
<th>Number of live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>2.11</td>
<td>128 879</td>
<td>1964</td>
<td>2.36</td>
<td>154 420</td>
</tr>
<tr>
<td>1968</td>
<td>1.83</td>
<td>137 437</td>
<td>1974</td>
<td>2.43</td>
<td>194 215</td>
</tr>
<tr>
<td>1999</td>
<td>1.13</td>
<td>89 471</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Birth cohort</th>
<th>CFR (completed fertility rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1943</td>
<td>2.02</td>
</tr>
<tr>
<td>1981</td>
<td>1.52</td>
</tr>
<tr>
<td>1950</td>
<td>2.10</td>
</tr>
<tr>
<td>1951</td>
<td>2.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>TFR</th>
<th>Number of live births</th>
<th>Mean age at first childbirth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.50</td>
<td>119 570</td>
<td>27.33</td>
</tr>
</tbody>
</table>
The birth cohort 1950 was the “luckiest” and documented the success of family policy measures of the 1970’s.

Low percentage of childless women 6,5%
Only one child women 14%
Two child women 54%
Three child women 21%
Recent changes in age intensity profile and fertility timing

Age-specific fertility rates

Mean age at first childbirth

Year


Age groups:
- 20-24
- 25-29
- 30-34
- 35-39
- 40+

Mean age at first childbirth:
- 20-24: Red
- 25-29: Blue
- 30-34: Green
- 35-39: Orange
- 40+: Yellow
The only ‘visible’ gain was recorded in the category of women aged 30-34.

However, this positive trend does not offset the decrease in fertility intensity recorded among young women aged 24 and under.

The same trend can be observed from cohort perspective.
Rapid shift by 9 years within 20 year period

Modal age
1988: 21
1998: 24
2008: 30
The most numerous 1974 birth cohort has been affected the most by the transformation of the 1990’s

In the year 1993 women were 19 and in 2008 at age of 34.

It combines low fertility before the age of 26-27 and slight compensation afterwards.
BIRTH ORDER
Decrease in the first and second birth order fertility contributes the most to the current drop

Changes in cross-sectional childlessness:

1988: 8.8 %
1998: 47.3 %
2008: 26.5 %

(percentage of childless women)
Unlike age, birth order fertility changes less over time and says more about the final number of children.

- Between 1986 and 2008, in the Czech Republic fertility rates primarily decreased in the first-order and second-order.

- Like with total fertility rate, the current rate of total first-order fertility is at the same level as in 1994 and the second-order fertility rate corresponds to levels in 1994-1995.
Fertility decrease affected all significant birth orders; is that the impact of postponement?

**TFR 1988:**
- 1st: 0.912
- 2nd: 0.733
- 3rd: 0.220

**TFR 2008:**
- 1st: 0.734
- 2nd: 0.548
- 3rd: 0.156

![Age and birth order specific fertility rates graph](chart.png)
EXTRAMARITAL FERTILITY
Increase in extramarital fertility mostly for the 1st birth order

Percentage of live extra-marital births by birth order

- 1
- 2
- 3
- 4+
- Total

Years: 1986 - 2008
A new and significant feature of fertility in the Czech Republic is the growing percentage of extramarital births.

- Until the start of the 1990s, extramarital births made up no more than 10% of the total.

- Nevertheless, the share of extramarital births is very differentiated by birth order.

- Extramarital fertility is highly prevalent among women with lower educational attainment.
Higher education more traditional behaviour
OTHER CONTRIBUTING FACTORS
Factors contributing to fertility change

- Contraception
- Break with the past conditions for parenthood
- Factual deterioration for reconciling work and family
Increased use of modern contraception has contributed to induced abortion (LIA) decline.
Disappearance of daycare for children under the age of three

Note: more than 100 %; children younger than 3 years are enrolled
<table>
<thead>
<tr>
<th>Sex of respondent</th>
<th>Parameter estimate</th>
<th>Pr &gt; ChiSq</th>
<th>Odds Ratios</th>
<th>Confidence Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>female vs male</td>
<td>-0.2044</td>
<td>0.0182</td>
<td>0.815</td>
<td>0.688 0.966</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Living with a partner together</th>
<th>Parameter estimate</th>
<th>Pr &gt; ChiSq</th>
<th>Odds Ratios</th>
<th>Confidence Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes vs no</td>
<td>0.8018</td>
<td>&lt;.0001</td>
<td>2.230</td>
<td>1.828 2.719</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Parameter estimate</th>
<th>Pr &gt; ChiSq</th>
<th>Odds Ratios</th>
<th>Confidence Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>basic vs secondary</td>
<td>-0.1807</td>
<td>0.1320</td>
<td>0.835</td>
<td>0.660 1.056</td>
</tr>
<tr>
<td>vocational versus secondary</td>
<td>0.0514</td>
<td>0.6103</td>
<td>1.053</td>
<td>0.864 1.283</td>
</tr>
<tr>
<td>university vs secondary</td>
<td>0.4131</td>
<td>0.0023</td>
<td>1.511</td>
<td>1.159 1.971</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Parameter estimate</th>
<th>Pr &gt; ChiSq</th>
<th>Odds Ratios</th>
<th>Confidence Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29 vs 30-39</td>
<td>-0.1001</td>
<td>0.3429</td>
<td>0.905</td>
<td>0.736 1.113</td>
</tr>
<tr>
<td>40-49 vs 30-39</td>
<td>-2.1800</td>
<td>&lt;.0001</td>
<td>0.113</td>
<td>0.086 0.148</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resident biological children</th>
<th>Parameter estimate</th>
<th>Pr &gt; ChiSq</th>
<th>Odds Ratios</th>
<th>Confidence Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 vs 2</td>
<td>2.4841</td>
<td>&lt;.0001</td>
<td>11.990</td>
<td>8.689 16.545</td>
</tr>
<tr>
<td>1 vs 2</td>
<td>2.0628</td>
<td>&lt;.0001</td>
<td>7.868</td>
<td>5.780 10.709</td>
</tr>
<tr>
<td>3+ vs 2</td>
<td>-1.9338</td>
<td>0.0066</td>
<td>0.145</td>
<td>0.036 0.583</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Religion</th>
<th>Parameter estimate</th>
<th>Pr &gt; ChiSq</th>
<th>Odds Ratios</th>
<th>Confidence Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>other vs none</td>
<td>0.4579</td>
<td>0.0053</td>
<td>1.581</td>
<td>1.146 2.181</td>
</tr>
<tr>
<td>roman catholic vs none</td>
<td>0.2500</td>
<td>0.0197</td>
<td>1.284</td>
<td>1.041 1.584</td>
</tr>
</tbody>
</table>

Generations and Gender Survey: second wave 2008

4 444 respondents: 1 685 males and 2 759 females aged 18-49
People’s attitudes towards parenthood slowly change

- People still value children, however, increasingly among highly educated and males.

- When looking at recent fertility patterns in the Czech Republic, a low-fertility trap will pose a real potential barrier to sustaining Czech population development in the future.