

Finnish fertility: Pro- or counter-cyclical?

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The puzzle

Scholars' engagement with the issue of how economic fluctuations and fertility are linked re-flourished in the aftermath of the Great Recession of 2008 when birth rates plummeted in many, if not most, Western countries. Media, policy makers' and the larger public's attention on the topic has grown substantially in the past few years (Politiken, 2018). The recent trends in period fertility rates in Europe and in the US confirm that the Great Recession was followed by a significant and widespread decline in births (Eurostat, 2018). Finland is no exception in this decline. Since 2010 the Total Fertility Rate (TFR) has plummeted, hitting an all-time low rate of 1.49 children per woman in 2017 (Figure 1; Statistics Finland, 2018). This persistent fertility decline came largely unexpectedly since the Great Recession hit the Nordic countries to a lesser extent compared to other regions of Europe.

The majority of the macro-level studies indicate that fertility rates are pro-cyclical to the economy, meaning that birth rates decline in recessions and increase with economic growth (Sobotka et al., 2011; Goldstein, 2013; Schneider, 2015; Comolli, 2017). The only single-country study on fertility during the recent crisis in Finland (Hiilamo, 2017) also finds a negative response of Finnish fertility rates to rising unemployment rates after the Great Recession. Interestingly, however, Finland had been hit by another stronger recession in the early 1990s and, except for Hiilamo (2017), most of the existing evidence on the response of fertility rates to the ups and downturns in the Finnish economy concerns the crisis of the nineties.

The aim of this article is to draw attention on the comparison of the fertility response to the two recessions of the last decades and to argue that the latter offers stimulating and puzzling evidence.

Previous research on the 1990s recession shows that, differently from other Nordic countries (Anderson, 2000), the pro-cyclical behavior of fertility to the business cycle was absent in Finland at that time (Vikat, 2004). On the contrary, the peak in fertility during the last decades of the 20th century was registered during the crisis, in the early-to-mid-1990s, and only later, the TFR slightly and smoothly declined. Figure 1 shows that the decline in birth rates has been stronger and more persistent during the recent recession period than in the 1990s. However, while the decline in birth rates was greater during the more recent recession, macroeconomic indicators show that the 1990s recession was far worse in terms of both output and labor market losses. Regarding the latter, for instance, both male and female unemployment rates rose more during the nineties than recently (Figure 2). For men, unemployment increased from around 3% to 18% between 1990 and 1995, and from around 6% to 10% between 2008 and 2015 (ILO, 2018). Women's unemployment moved somewhat more smoothly during the entire period, with lower peaks during the

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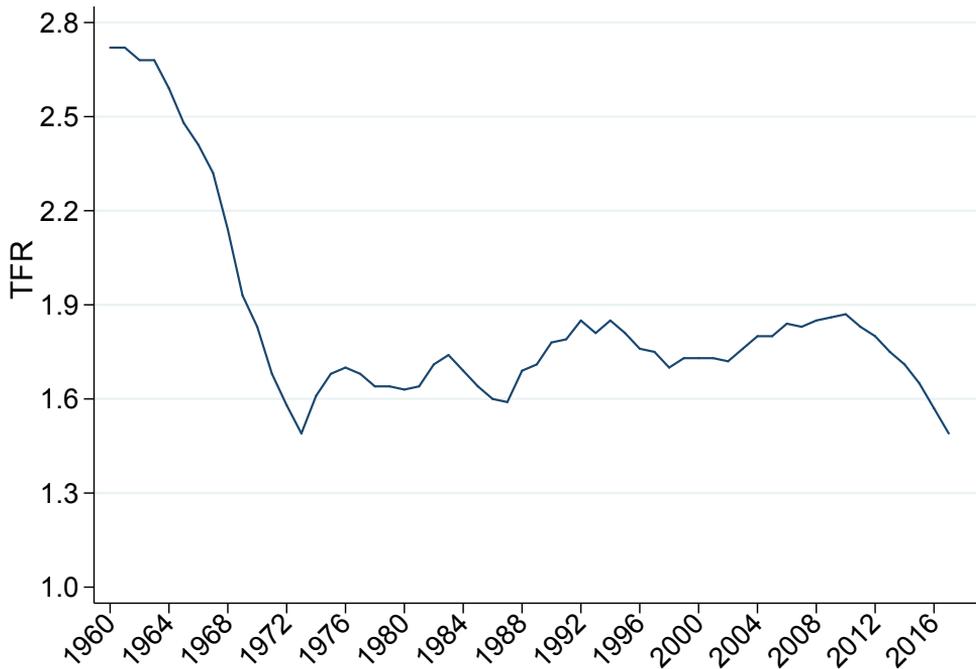


Figure 1. Total Fertility Rate in Finland in 1960–2016.

Source: Eurostat (2018) and Statistics Finland (2018).

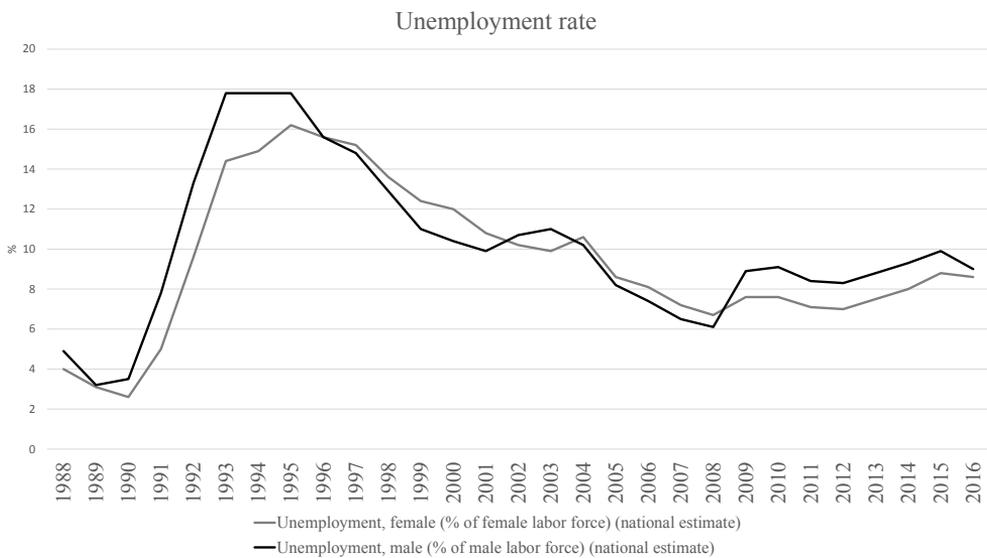


Figure 2. Male and female unemployment rates in Finland in 1988–2016.

Source: ILO (2018).

recession periods but also a slower recovery afterwards. When the Great Recession hit the Finnish economy in 2008, unemployment rates were still higher than their pre-1990s crisis levels. Economists suggest recession periods but also a slower recovery afterwards. When the Great Recession hit the Finnish economy that some of the effects of the 1990s crisis were permanent or, at least, long lasting (Fregert & Pehkonen, 2009; Jonung et al., 2009). The structural rate of unemployment increased during the 1990s and persisted at higher levels than in the 1980s (Jonung et al., 2009). Moreover, temporary contracts increased after the 90s crisis and remained the majority of the new job contracts for a decade at least: in the period 1993–2004, 60% of new contracts were temporary (Jonung et al., 2009). Job insecurity has been rising since the mid-nineties and individuals now work longer hours and need to show more commitment to work to keep their job (Lehto & Sutela, 1999; Vikat, 2004).

The age-groups compensatory mechanism

Only once birth rates are analyzed by parity and age groups, does the data suggest that during the 1990s some pro-cyclical behavior existed among the very youngest women postponing their entry into motherhood (Vikat, 2002). Vikat (2002) shows that the two decades 1980–2000 can be divided into three intervals with different first-birth intensities with divergent behavior by age groups. The positive trend in the propensity to enter motherhood of the late 1980s came to a halt exactly at the onset of the recession in 1991 and reverted to a declining trend thereafter. The decline, however, was concentrated only among women below the age of 30, whereas older women (31–49) still displayed a positive trend in first births. In contrast, the upward trend in second and third births only turned negative after 1994 (Vikat, 2002, 166). The same trends for parities one and two are illustrated in Figure 3 for the period since 1990 (Eurostat, 2018). Panel (a) shows the change in first births per 1000 women by 5-year age groups between 1990 and 2015 relative to the chosen base year, 1991. Here we see that after 1991 first births declined significantly for women in their twenties until 1998 and that, after a slight increase at the end of the century they stabilized but never returned to pre-1991 levels. In contrast, first births to 30–39 year old women kept increasing despite the recession, while births to women below 20 and above 40 remained almost constant. After 2010 first births to women aged 20–29 declined at a similar pace as in the nineties (but starting at a lower level) but also first births to women in their early 30s declined while among women aged 35–39 they remained constant. Panel (b) shows the change relative to 1991 in second birth rates in the same age groups. Second births among the youngest (15–19) and oldest (40–44) age groups remained constant throughout the period while second births to women in their twenties declined during both crises. Second births to women in their thirties kept increasing during and after the 1990s crisis but have declined more recently. Women in their twenties postponed first and second births during both recession periods even though the decline in the former was more pronounced.

Overall, while the birth rates of women in their 20s have been similarly pro-cyclical in the two periods, the difference between the 1990s and the Great Recession lies in the birth rates of women in their thirties. The differential behavior among women in different age groups might be a reason why period rates did not show such a large decline in the 1990s but they do today. Older women's positive first birth rates in the 1990s, i.e. their counter-cyclical response, might have compensated the pro-cyclical postponement of motherhood by younger women. This compensatory behavior by older women is absent after 2010 since they also responded pro-cyclically to the crisis. However, a systematic test of this hypothesis, especially on the most recent period, is lacking. Future research could focus on the change over time of individual-level childbearing behavior of relatively older women, closer to the end of their reproductive lives. As shown in other contexts, these women further incur the risk that postponement slides into permanent childlessness (Comolli & Bernardi, 2015).

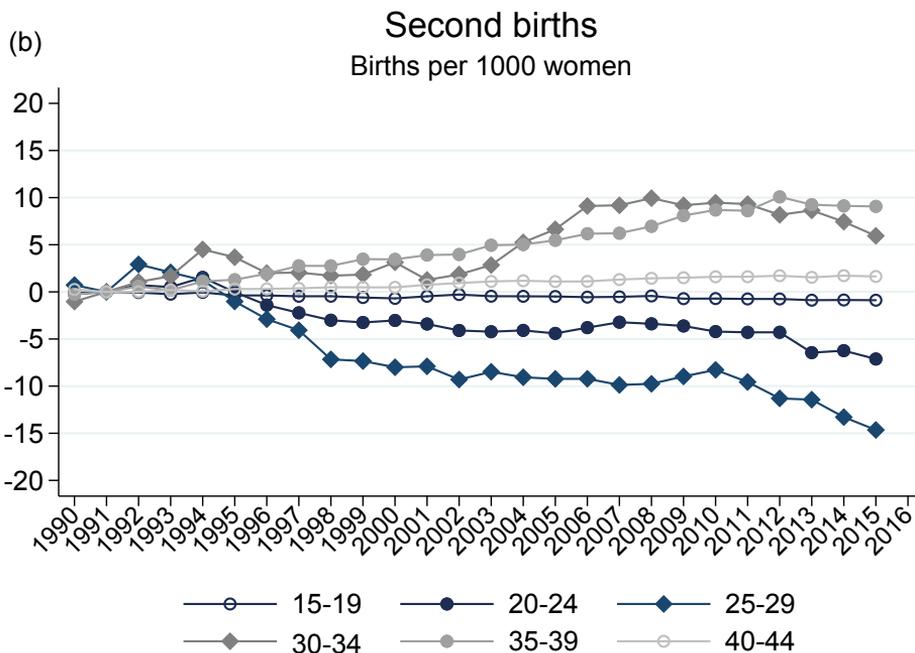
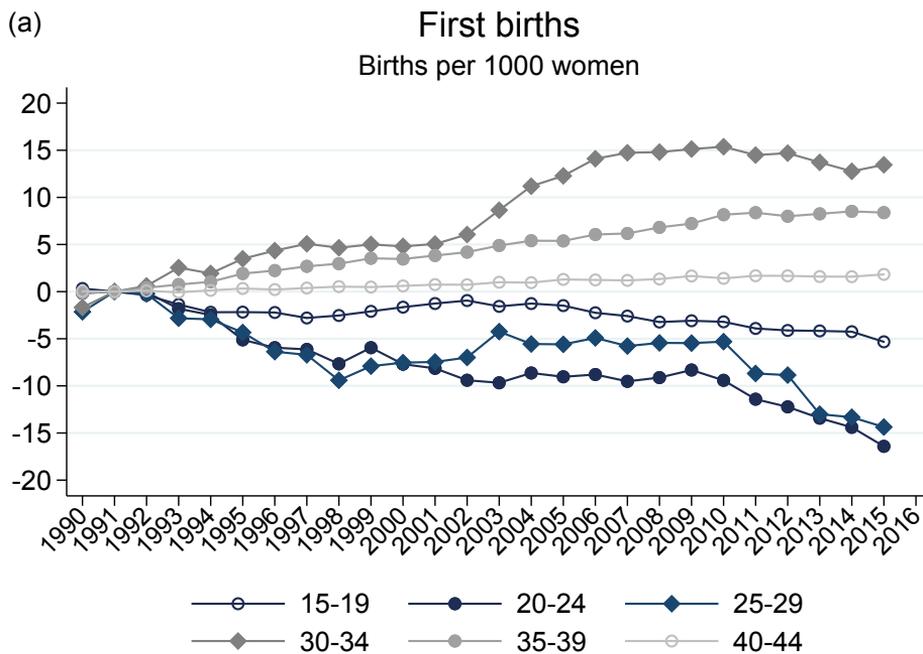


Figure 3. First and second births per 1000 women by age groups relative to 1991.
Source: Eurostat (2018).

The policy mechanism

Vikat (2004) shows that the decline in first births in the 1990s was concentrated among employed and medium-to-high income women and not, as expected, among the more vulnerable group of women. The compositional change brought about by the 1990s crisis, with increasing unemployment and low incomes at the expense of employed and high earning women, did not affect fertility rates as much because the propensity to childbearing used to be very similar across groups, or even slightly higher in the unemployed-low income group. Many authors attribute this similarity to a specific policy: the Home Care Allowance (HCA). While there is no micro-level evidence in support of this theory, the HCA has often been pointed as responsible for the counter-cyclicity of fertility in Finland during the 1990s recession (Sipilä & Korpinen, 1998). The HCA is an allowance given to parents of children below the age of three to stay at home to take care of them if the child does not attend public childcare. It was introduced just before the onset of the recession (the law passed in 1985 and became fully effective in 1990). The HCA may represent an attractive alternative to shrinking opportunities in the labor market for women, whereby childbearing is seen as an alternative to being unemployed. This was even more the case until 1993, when it was possible to combine HCA with unemployment benefits. In particular, second and higher order births have been shown to move with HCA take-up and with the size of the allowance, which would be consistent with the evidence above on the counter-cyclical behavior of higher parities during the crisis in 1991–93 (Vikat, 2002). Despite the crisis, the Finnish welfare state seems to have buffered the effect of the recession during the nineties, inducing couples to think that the crisis was only temporary and many took advantage of unfavorable career conditions to have a child. However, this remains empirically untested. Despite the uptake of the HCA being quite extensive in Finland, fluctuating over the years around a coverage of 40–50% of children below the age of three, the HCA has always been a small amount, around 10% of an average monthly wage (Vikat, 2002). This likely contributes to the fact that women with low income, low education and with an immigrant background are the most likely to receive the benefit (Eydal & Rostgaard, 2012). The role of the HCA, as of other family policies, on shaping the childbearing incentives during the most recent period of the 2000s remains untested. Similarly, there are no studies investigating the role of these policies in buffering the impact of the Great Recession on births.

The fertility response to unemployment

A recent paper (Hiilamo, 2017) has investigated the macro-level response of fertility rates to the Great Recession in Finland. Hiilamo (2017) finds a negative association of 0.13% between total fertility rates and a 1 percentage point rise in the unemployment rate in the period 1991–2015. The study further argues that there was a stronger negative response of fertility to unemployment after 2008 compared to the nineties. This is certainly an important finding. However, a different picture emerges if we explicitly focus on the period comparison. Figure 4 shows the change in parity- and age-specific fertility rates (ASFR) associated with a 1% increase in unemployment rates (Eurostat, 2018) in Finland in the period 1990–2000 and the period 2001–2015. The panel on the top left shows the overall fertility response by age groups while the other three panels report the results by parity from the first to the third. In the nineties, there seems to be no response of first birth rates to rising unemployment rates (except for teenage women aged 15–19 years), while in the 2000s the response of first birth rates to unemployment is significantly negative in all age groups (for teenagers estimates are very imprecise). Second births show a very similar pattern. The counter- or no-cyclicity of fertility rates to unemployment in the 1990s in all age groups is puzzling per se but it is even more puzzling when considering the radical change into a pro-cyclical response of fertility to unemployment since the turn of the century. Whether this has been caused by the different nature of the two economic crises, or not, has to be empirically determined. However, this is unlikely to be the case since, when the same association between fertility and unemployment is measured during the two

recession episodes specifically (1990–1996 vs. 2009–2015), instead of the decades overall, this opposite cyclicity does not emerge (not shown). The latter evidence would suggest that some long-term change was taking place already before the onset of the Great Recession, namely that fertility rates declined in response to long-term changes, such as rising structural unemployment and not to cyclical unemployment, maybe because of cumulative negative effects of the deterioration of the labor market in Finland.

More research, especially at the individual level, comparing the two recessionary episodes in more detail would shed light on the rationale of such a different fertility response to the business cycle in Finland.

Parity and age-specific fertility response to unemployment rate Finland 1990-2015

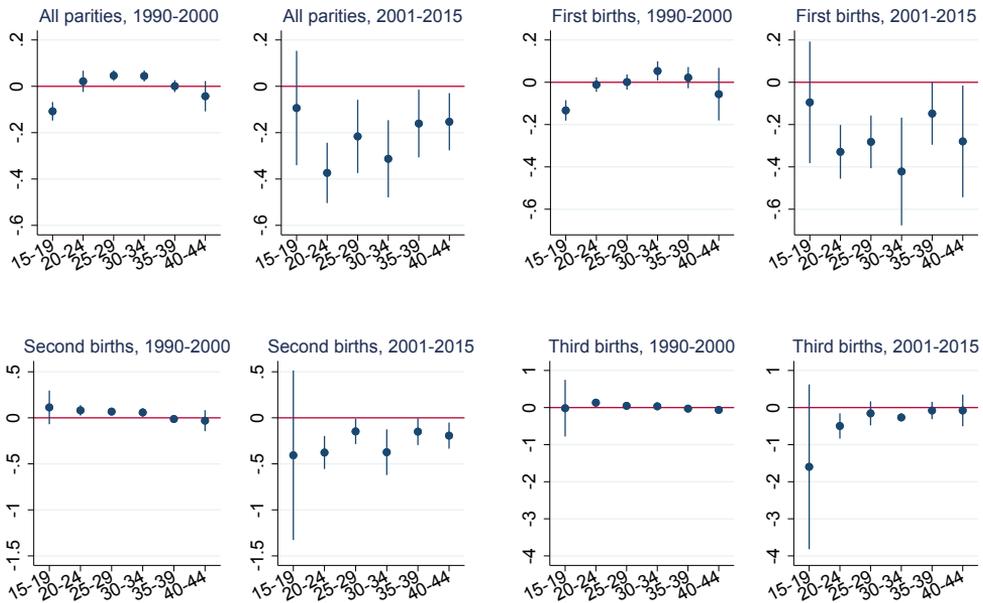


Figure 4. Parity- and age-specific rates' association with a 1% increase in unemployment rate.

Source: Eurostat (2018).

Acknowledgments

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Author biography

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