

**Statistical Research and  
Training Center**

**Webinar on:  
Demographic Impacts of COVID-19  
Fertility and Childbearing in The Era of Pandemic**



**University of  
TEHRAN**

# **The Impact of COVID-19 on Fertility and Childbearing Behaviors**

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# Outline

- **Introduction**
- **Impact of COVID-19 on Fertility & Childbearing: International Lessons**
- **Paths of influence of COVID-19 on Fertility**
- **Main Findings from the Survey**
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# Introduction

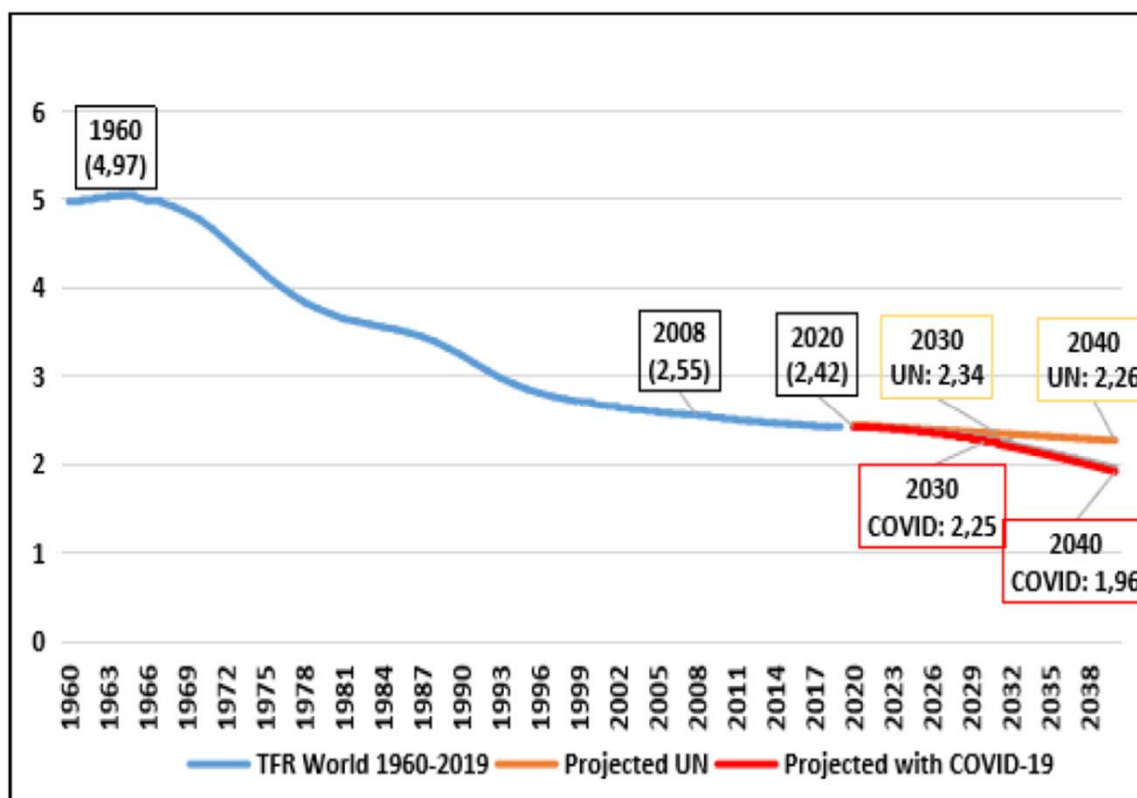
- ❑ The COVID-19 pandemic is not only a global health emergency, but is also leading to a major global economic downturn and social uncertainty.
- ❑ The impact of COVID-19 has been massive and unprecedented, affecting almost every aspect of our daily lives.
- ❑ COVID-19 is expected to impact the size, composition and distribution of national populations due to disruptions in long-term trends in mortality (Goldstein and Lee, 2020, Banerjee et al., 2020, Ferguson et al., 2020, Trias-Llimós and Bilal, 2020), fertility (Luppi et al., 2020, Stone, 2020) and migration (Balbo et al., 2020).

# Introduction

- Evidences of demographic responses to shocks and economic recessions (Matysiak et al., 2020) suggest that economic downturn and uncertainty is likely to negatively affect fertility.
- The effects of the COVID-19 pandemic will affect some key fertility-related behavioral patterns, such as family formation and stability, gender relations, the transition from school to work, contraception use & ART Services.
- **Thus**, COVID-19 is expected impact on childbearing planning, leading to a postponement and abandonment of planned births.

# Impact of COVID-19 on Fertility & Childbearing: International Lessons

it is proposed that total fertility rates could deviate to levels of 2.28 by 2030, and 1.96 by 2040. The reasons why this scenario could occur lie in the fact that it would be difficult to observe a "rebound" or a **rapid economic recovery**, which would prolong the high levels of uncertainty and unleash adverse social effects that would impact on fertility.



**Total Fertility Rates in the world, 1960-2040 (in The Era of COVID-19 Pandemic)**

Notes: From 1960 to 2018, we consider the World Bank's total fertility rates. Starting in 2020, the estimates by the United Nations Population Division (2019 Revision of World Population Prospects) before the pandemic (yellow line) and our approximations (red line) towards the year 2040 are used.

# Impact of COVID-19 on Fertility & Childbearing: International Lessons

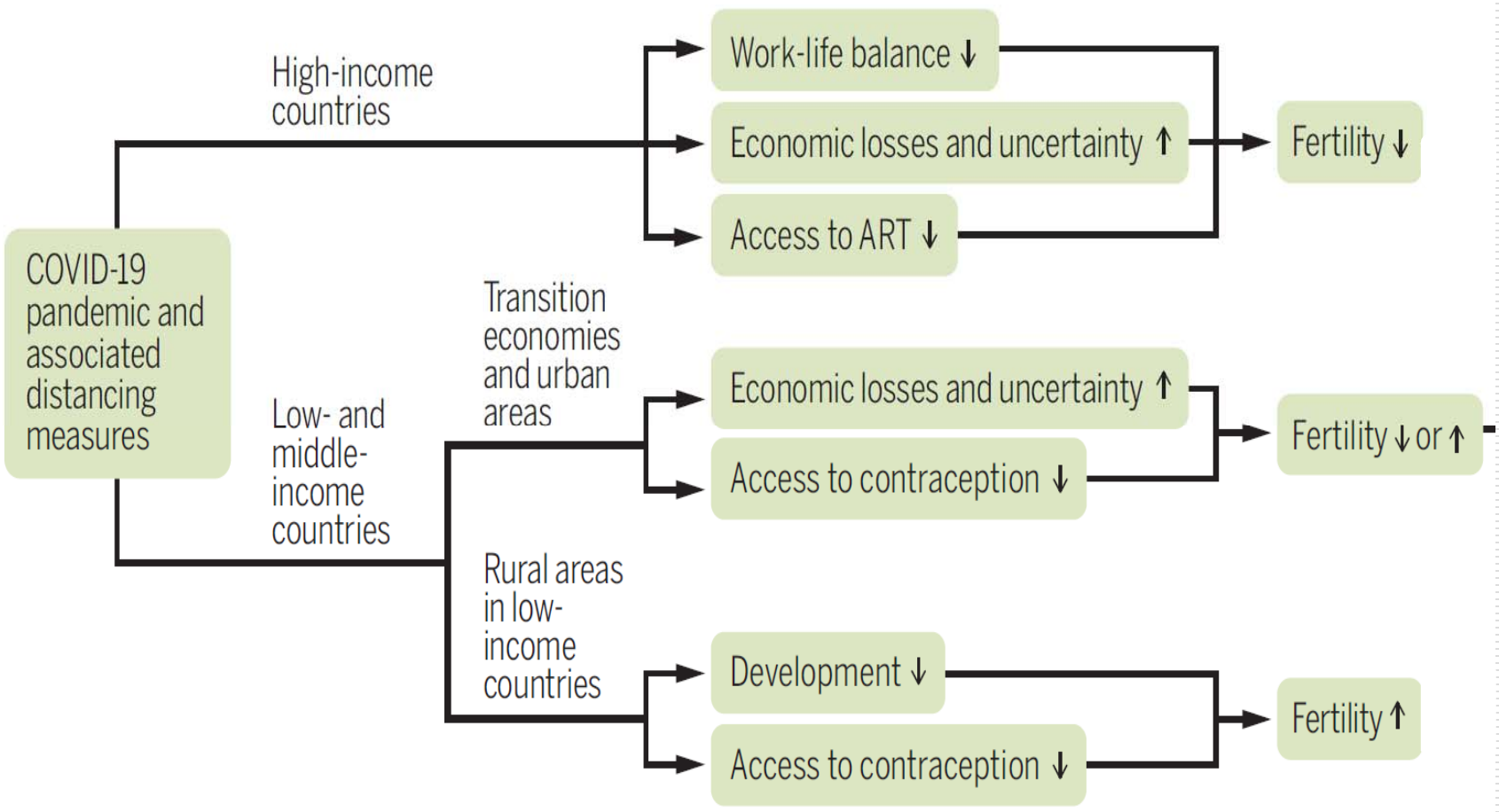
- Luppi et al (2020) showed that fertility plans have been negatively revised in all countries, but not in the same way.
- In Germany and France fertility plans changed moderately, with many people still planning their decision to have a child.
- In Italy the proportion of abandoners is much higher than in other countries, especially among individuals younger than 30.
- In UK, fertility plans have been most frequently postponed, particularly by individuals that expect the worse impact of the crisis on their future income.



# Impact of COVID-19 on Fertility & Childbearing: International Lessons

- Micelli et al (2020) in Italy found from 18.1% participants who were planning to have a child before the pandemic, 37% abandoned the intention, related to worries of future economic difficulties and consequences on pregnancy.
- Zhu et al (2020) in Shanghai found that under the influence of COVID-19, 66% participants did not change their original fertility intention to have children, while 34% of participants did change and were affected by the outbreak.

# Fertility trends in response to the pandemic will vary according to socioeconomic conditions



Source: Aassve et al. 2020

Thus, different mechanisms are at work, possibly due to the different economic, demographic and policy pre-crisis background and post-crisis prospects.



# **Paths of influence of COVID-19 on Fertility & childbearing**

- Economic downturns**
- Uncertainty & Risk society**
- Health shocks & concerns**
- Disruption in Child Care services**

# Economic downturns

- ❑ The overall economic downturn and the loss of jobs create a climate of great uncertainty, which depresses family formation and childbearing plans (Goldstein et al. 2013, Vignoli et al. 2020).
- ❑ Economic recessions highlights the fertility postponing effects, particularly for young childless adults (Goldstein et al., 2013).
- ❑ Thus, economic crises are associated with the change of fertility intentions as couples avoid conceiving in such circumstances.

# Uncertainty & Risk society

- ❑ Uncertainty is an unavoidable part of life but for many people, it triggers harmful levels of stress.
- ❑ Coronavirus pandemic has unleashed an unprecedented shock of uncertainty, which has spread at tremendous speed throughout the world( Carballo and Corina, 2020).
- ❑ During the Covid-19 Crisis, the degree of uncertainty in decision-making processes is increased.
- ❑ The pandemic has triggered a massive uncertainty in several dimensions, leading to disruptive economic and social changes that could affect trends in fertility rates
- ❑ High levels of uncertainty that are determining future fertility trends and changes in family behaviors

## The 'uncertainty hypothesis'

- Frequent spells of unemployment, low-status and temporary jobs, and 'churning' in their occupational careers signal that men have not yet attained career certainty. Until career certainty is reached, a man's economic prospects make him unattractive in the marriage market. Moreover, men lacking career certainty are also likely to have wider psychological and social characteristics that make them less prepared for marriage. Thus, if career certainty becomes more difficult to attain, men will tend to postpone marriage or even forgo it altogether.
- Mills, M. and Blossfeld, H-P. 2005. 'Globalisation, uncertainty and the life course. A theoretical framework', in Blossfeld, H-P, Klizing, E., Mills, M. and Kurz,K (eds). *Globalisation, Uncertainty and Youth in Society*. Routledge: London: pp. 1-25 .
- McDonald, P. 2006. 'Low Fertility and the State: The Efficacy of Policy'. *Population and Development Review*, 32(3): 485-510.

# Health shocks & concerns

- ❑ Pregnant women with higher risk of infected & death with COVID-19
- ❑ Fear of getting infected & death that could affect childbearing plans.
- ❑ Zhu (2020) in Shanghai found that concerns about the impact of COVID-19 on female and fetal health led participants to cancel their original pregnancy plans.

# Disruption in Child Care services

- Another aspect of the COVID-19 crisis is that it involves large-scale closures of daycare centers and schools, implying that children stay at home, where they have to be cared for and (if possible) educated.
- Closures of schools and daycare centers have massively increased child care needs, which has a particularly large impact on working mothers. (Alon et al. 2020).
- Grandparent-provided childcare is now discouraged due to the higher mortality rate for the elderly, and given social distancing measures, sharing childcare with neighbors and friends is very limited also.
- Thus, most families have no choice but to watch their kids themselves

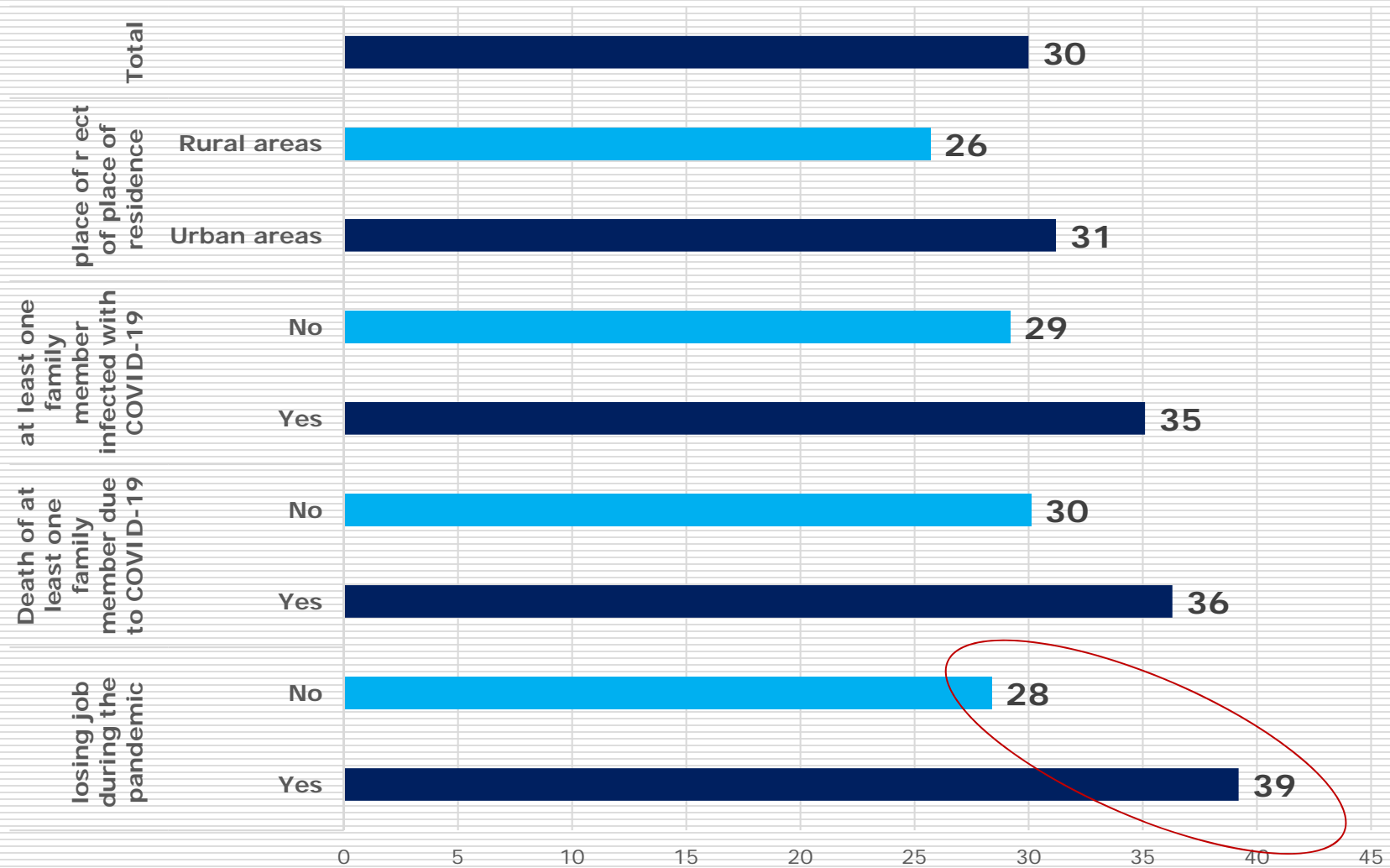
# Potentials of COVID-19 to increase fertility

- Working from home could encourage re-thinking of work life balance and less postponement
- More time spent with partner in home
- Perceived / actual reduced access to contraception services

Less access and failures –increases unplanned pregnancies, but fertility depends on abortion practices

# **Main Findings from The Survey**

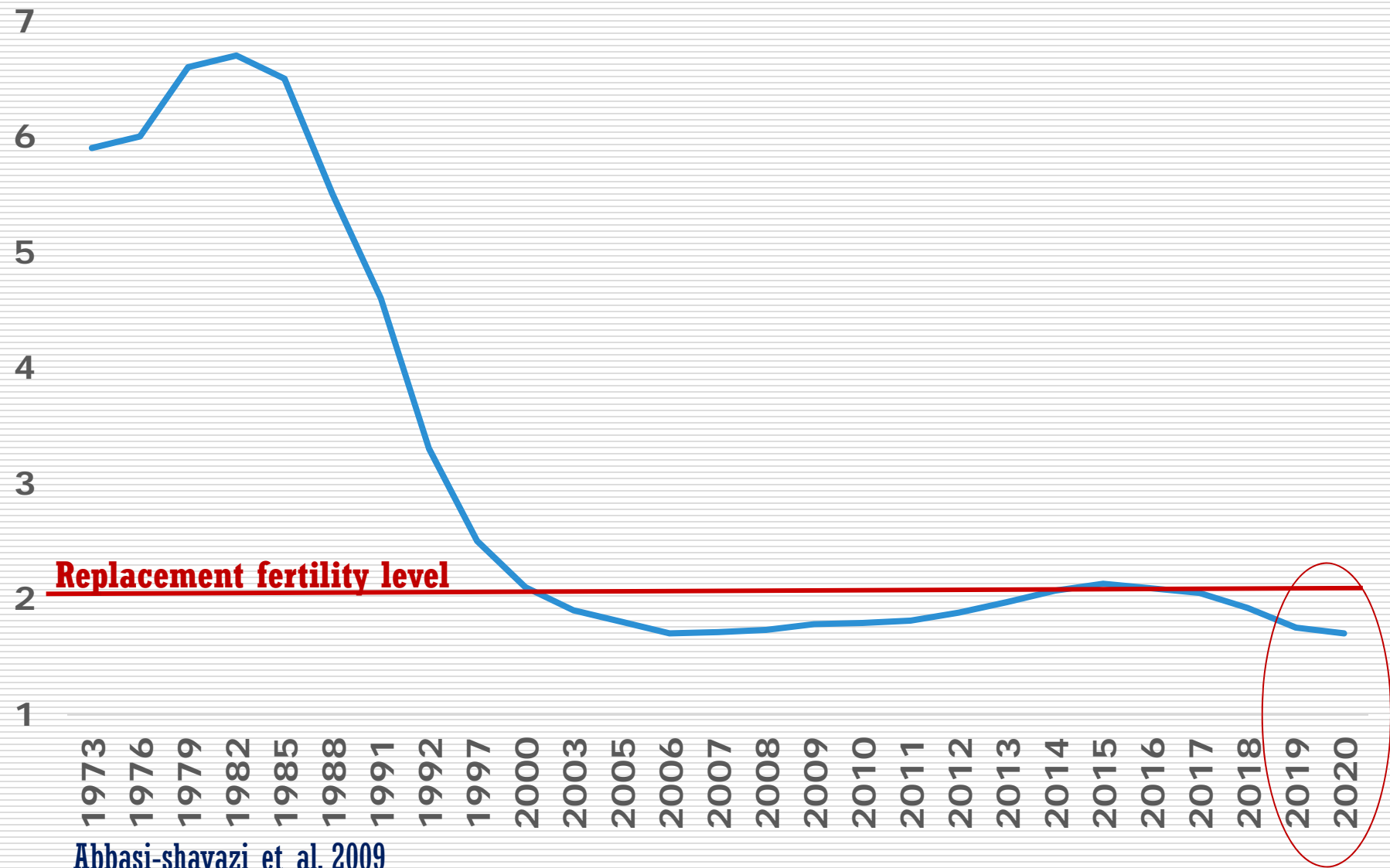
# Postponement of Marriage due to Covid-19 pandemic (%)



deciding to get married

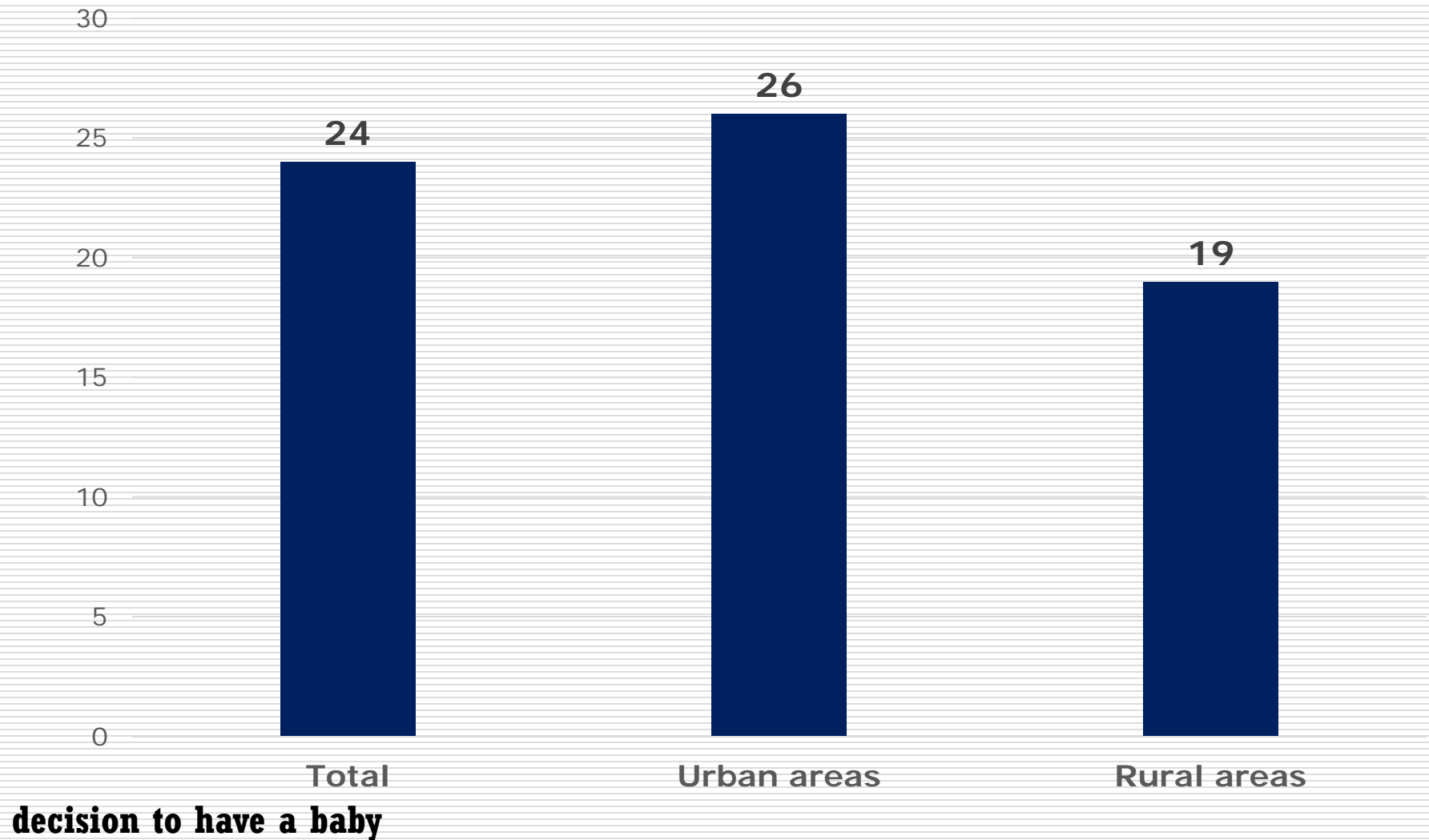


# Fertility decline (TFRs) in Iran, 1973-2020

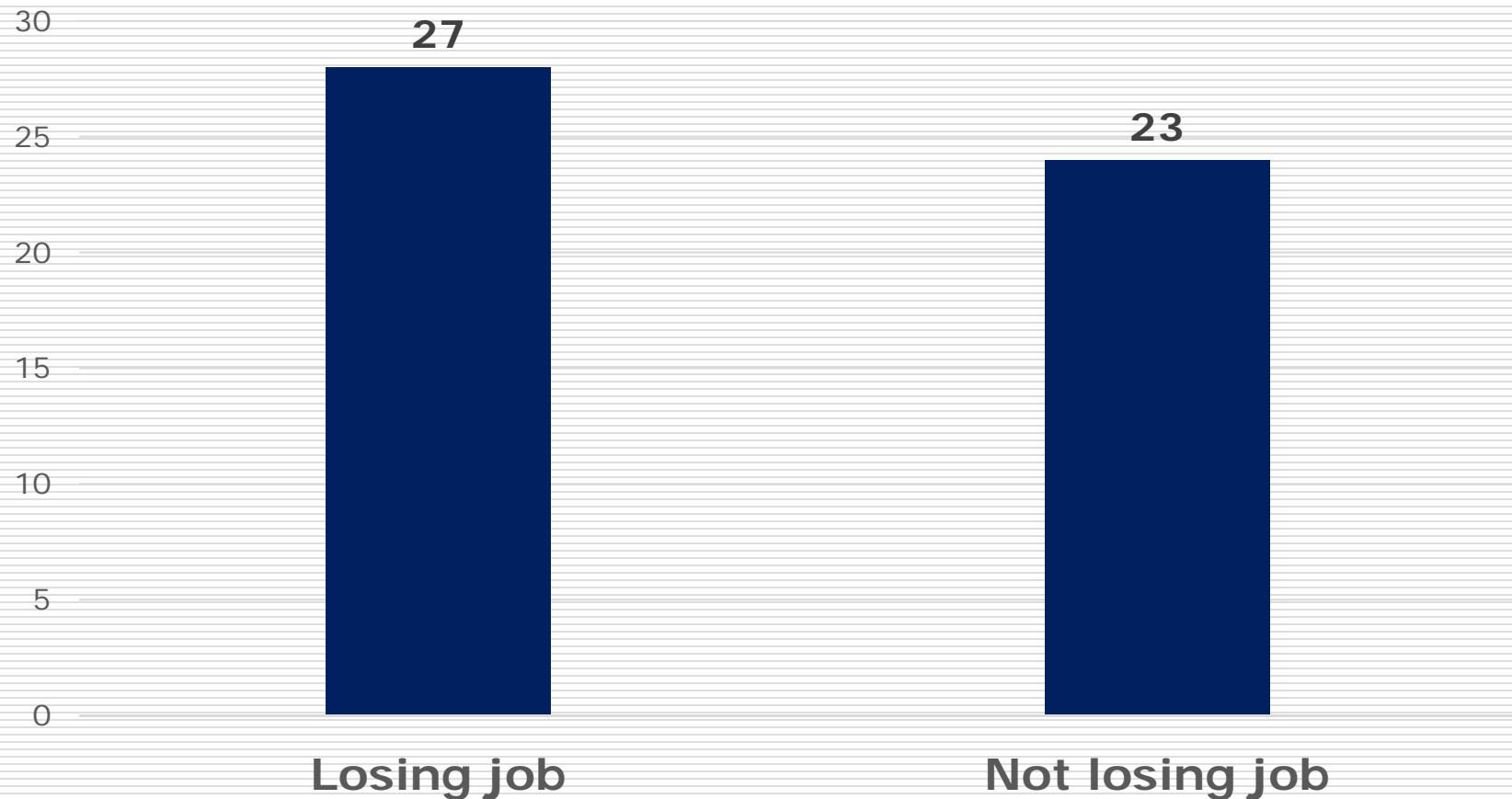


Abbasi-shavazi et al. 2009

# Postponement of childbearing due to Covid-19 pandemic (%)

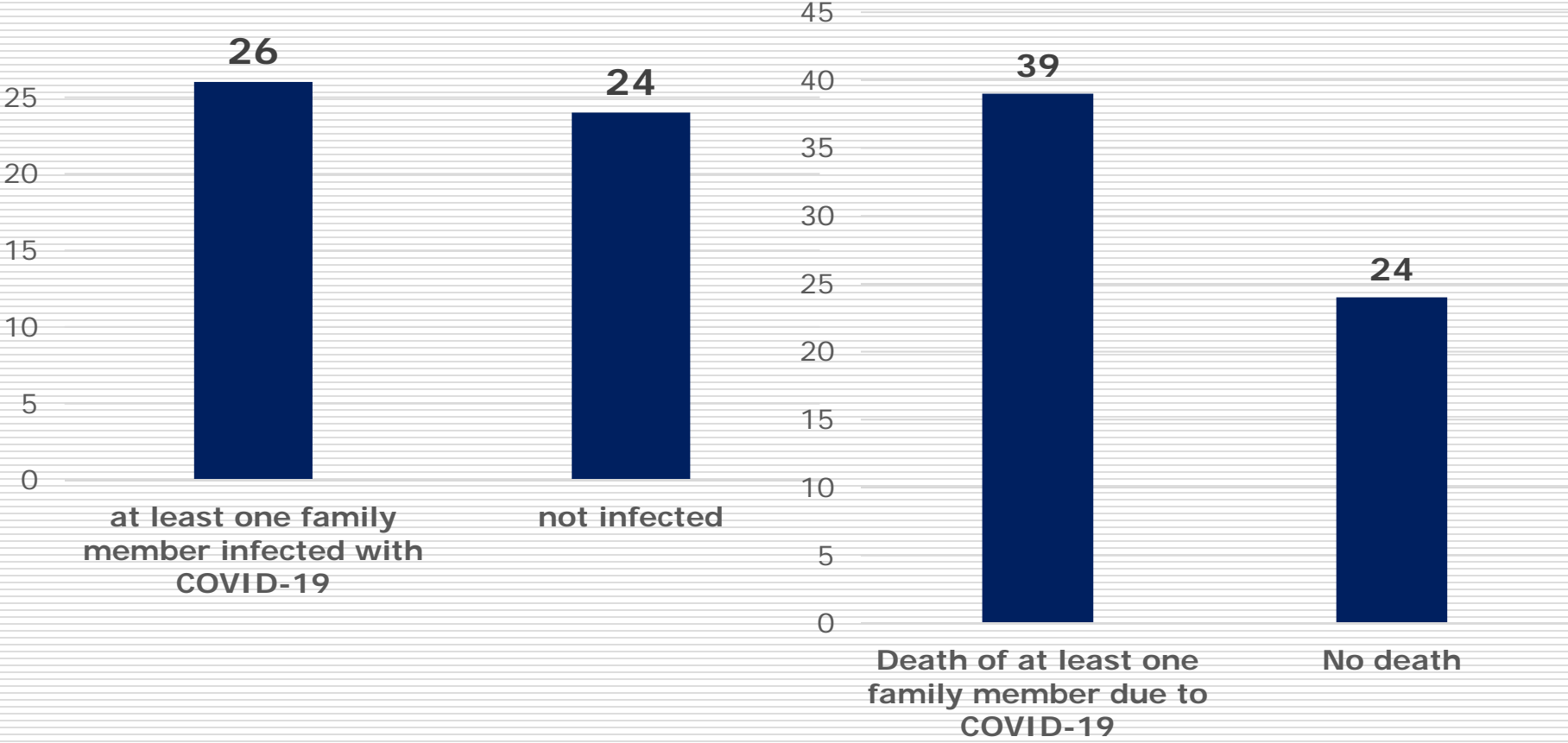


# Postponement of childbearing due to Covid-19 pandemic by losing job during the pandemic (%)



**decision to have a baby**

# Postponement of childbearing due to Covid-19 pandemic by infection and death of Coronavirus(%)



**decision to have a baby**

# Conclusion

- Individuals experiencing and/or perceiving greater economic uncertainty & health shocks are at higher risk of postponing their fertility plans (e.g. Kreyenfeld et al. 2012, Comolli and Vignoli 2021, Matysiak et al. 2021, Hofmann et al. 2017)
- We might expect that the COVID-19 pandemic will depress fertility
- TFR was declining before the onset of the pandemic, this could mean a further decline in period fertility to historically low levels.

# Policy implications

- Economic and labour market situations, together with the welfare policies may support or further reduce individuals' pre-crisis fertility plans reducing (or not) the uncertainty derived from the enduring health emergency and the negative economic trend (Adsera 2004, Caltabiano et al. 2017, Vignoli et al. 2019)
- **Thus**, family-friendly policies, financial supports of young couples during COVID-19 and safe health centers for pregnant women are strongly recommended.

**Thank You**

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