

Post-Soviet countries not experiencing the postponement transition: does religious affiliation matter?

Konstantin Kazenin (kz@ranepa.ru)

(Russian Academy for National Economy and Public Administration, Moscow)

&

Vladimir Kozlov (vakozlov@hse.ru)

(National Research Institute – Higher School of Economics, Moscow)

Wittgenstein Center Conference 2018 / 3rd Human Fertility Database Symposium

FERTILITY ACROSS TIME AND SPACE: DATA AND RESEARCH ADVANCES

Vienna, 05 December 2018

The plan

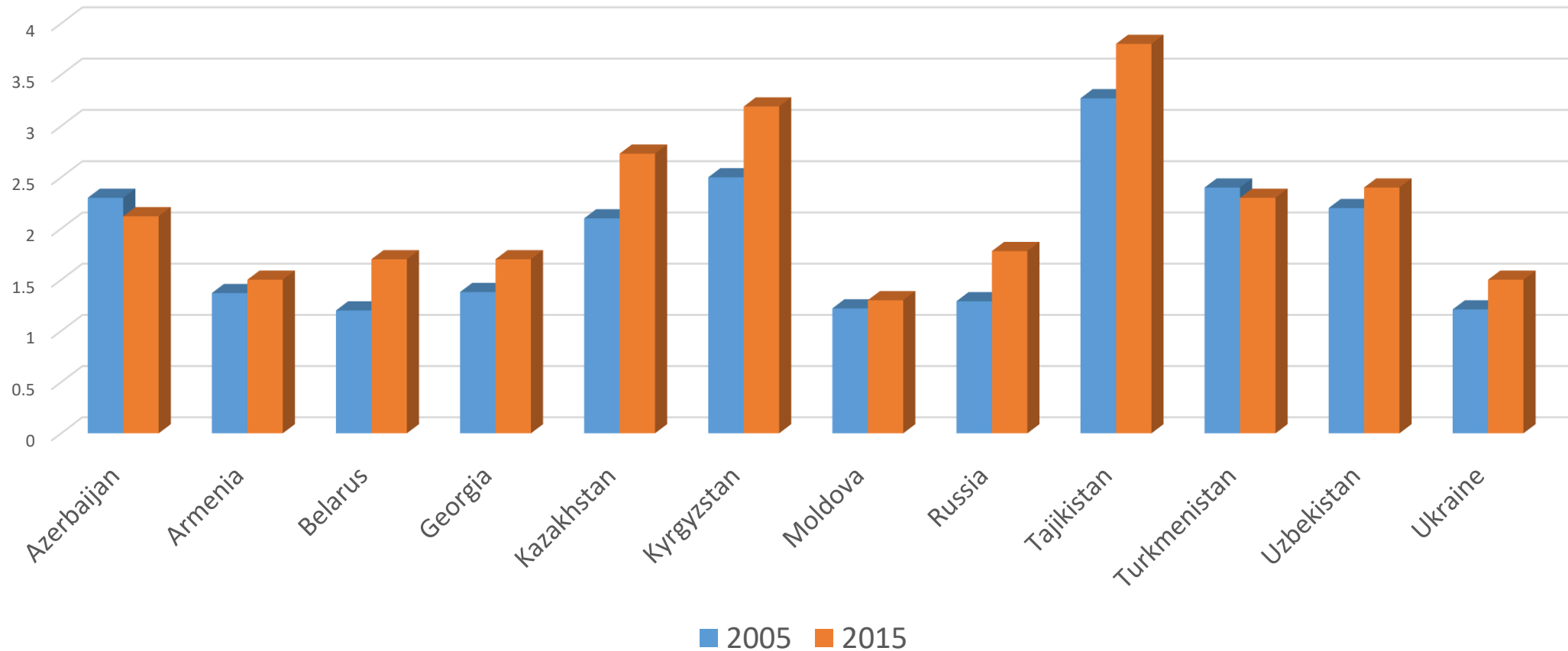
1. Recent dynamics of fertility timing in post-Soviet countries: lack of postponement in countries where Muslims are the majority, unlike countries with different religious composition of population (a general overview based on period data);
2. Evidence for the role of religion: country-internal differences between population groups of different religious affiliation.
3. Cohort evidence supporting the lack of postponement among Muslim population in (some) post-Soviet countries.

1. Timing asymmetries between post-Soviet countries: a general overview based on period data

Fertility in post-Soviet countries after 2000

- Raise in period fertility between 2005 and 2015 in most countries (despite a decrease/stalling around 2008 in some countries);
- Continuing fertility postponement in some countries (Zakharov 2008 for Russia; Perelli-Harris 2008 for Ukraine, etc.) – an instance of Postponement Transition (Billari, Libfroer, Philipov 2006).

Total Fertility Rates in post-Soviet countries, 2005 and 2015

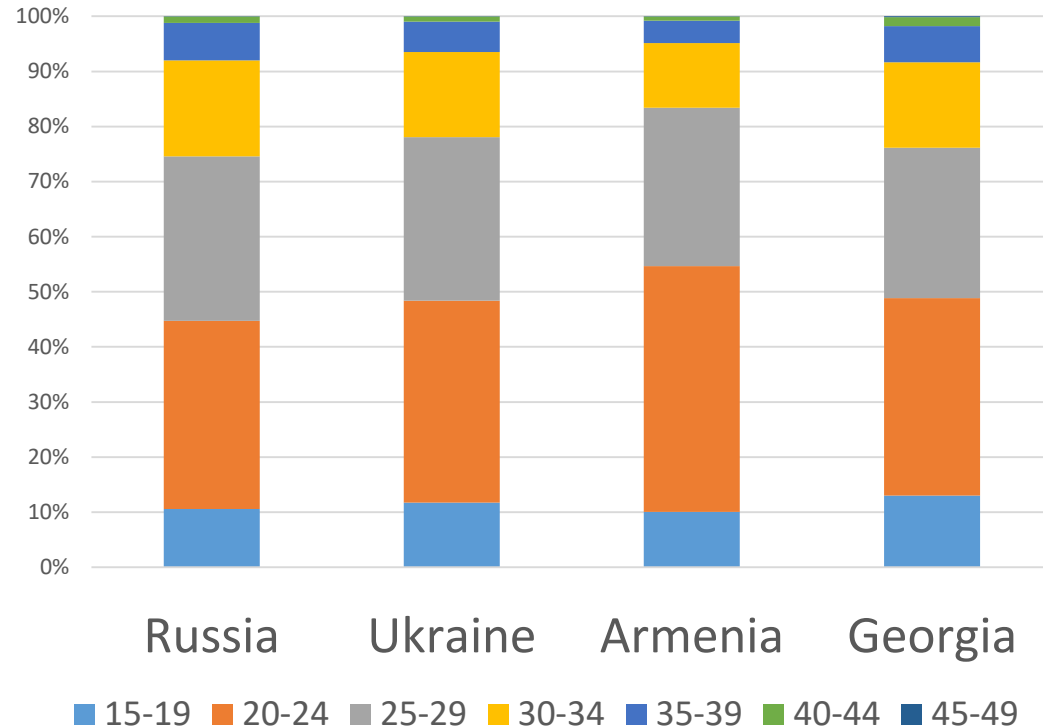


Source: national statistics offices.

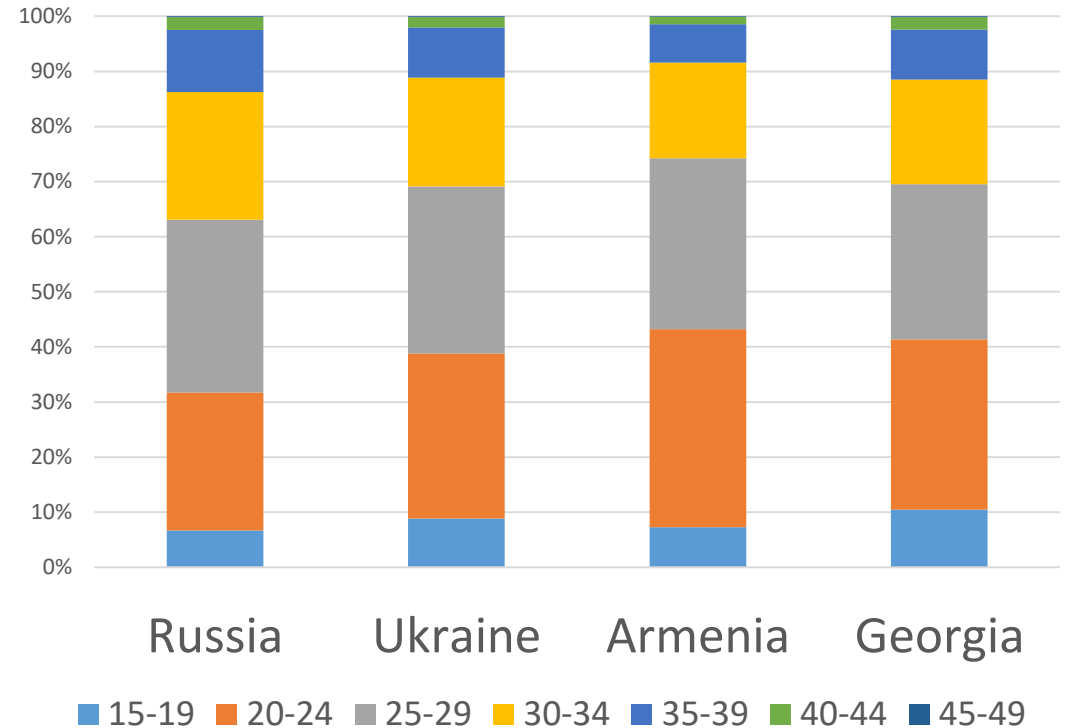
NB: NB reestimation of Moldova fertility in UNDP reports

Inputs of age groups to TFR: Armenia, Georgia, Russia and Ukraine (%)

2004-2006

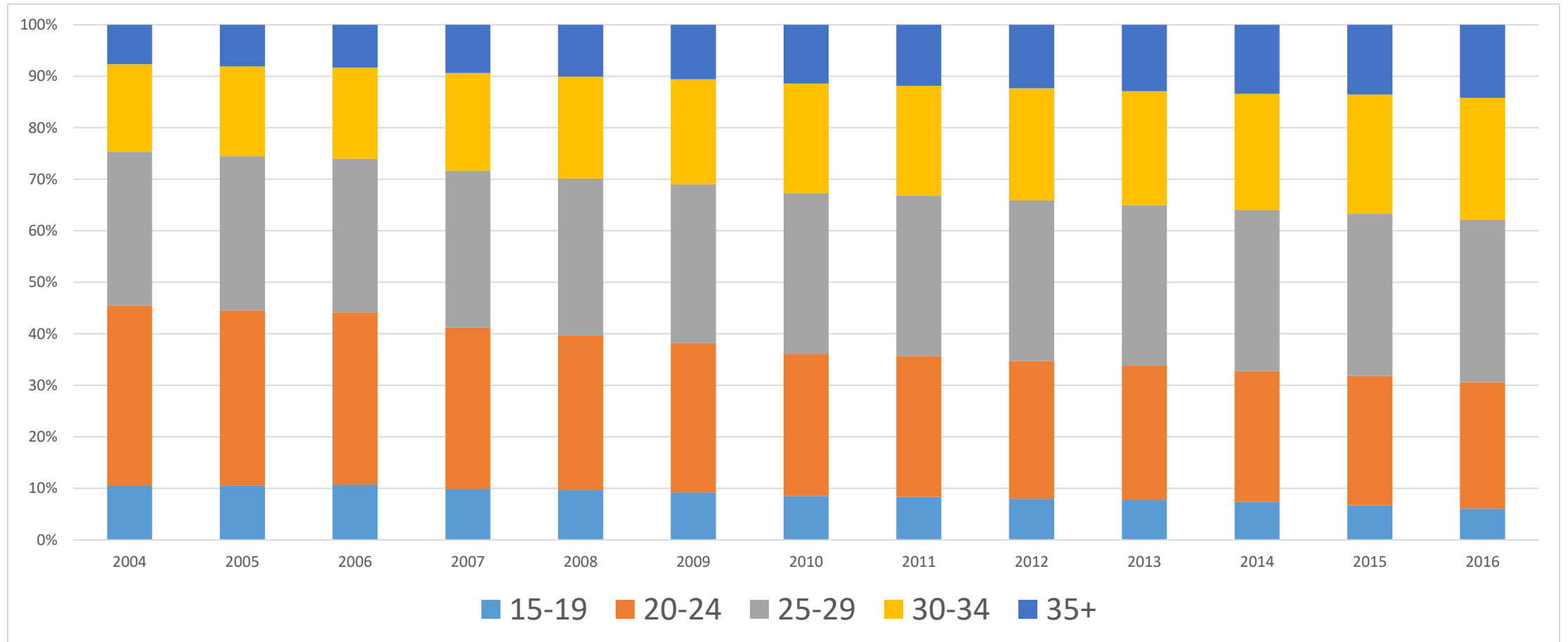


2014-2016



Source: national statistics offices

Inputs of age groups to TFR, Russia, 2004-2016 (%)



Source: Russian National Statistic Agency

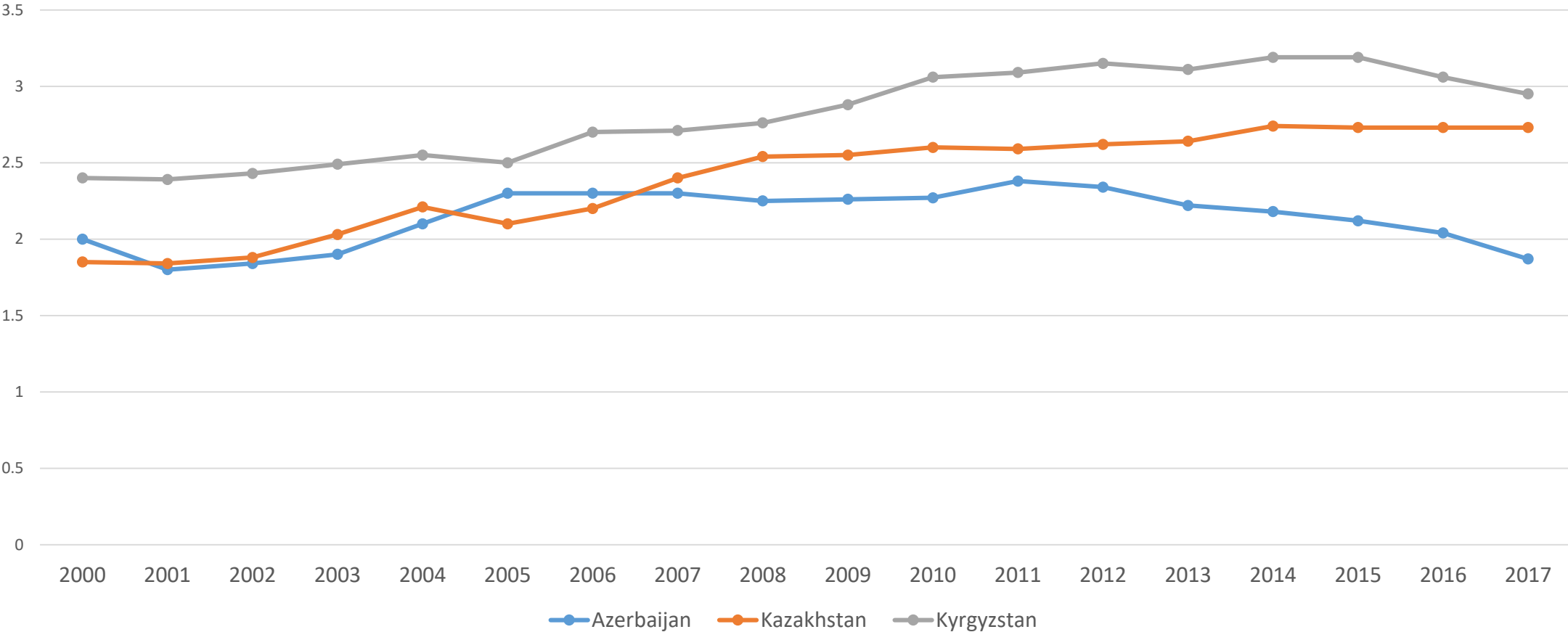
Central Asia and Transcaucasia



Kazakhstan and Kyrgyzstan (Central Asia) and Azerbaijan (Transcaucasia) in 2000-2010s

- TFR growth in Kazakhstan and Kyrgyzstan (Agadjanian et al. 2013; Spoorenberg 2017a, 2017b), fluctuations in Azerbaijan (Avdeev 2015);
- No fertility postponement between mid-2000s and mid-2010s;
- Muslim population is the majority, unlike other post-Soviet countries.

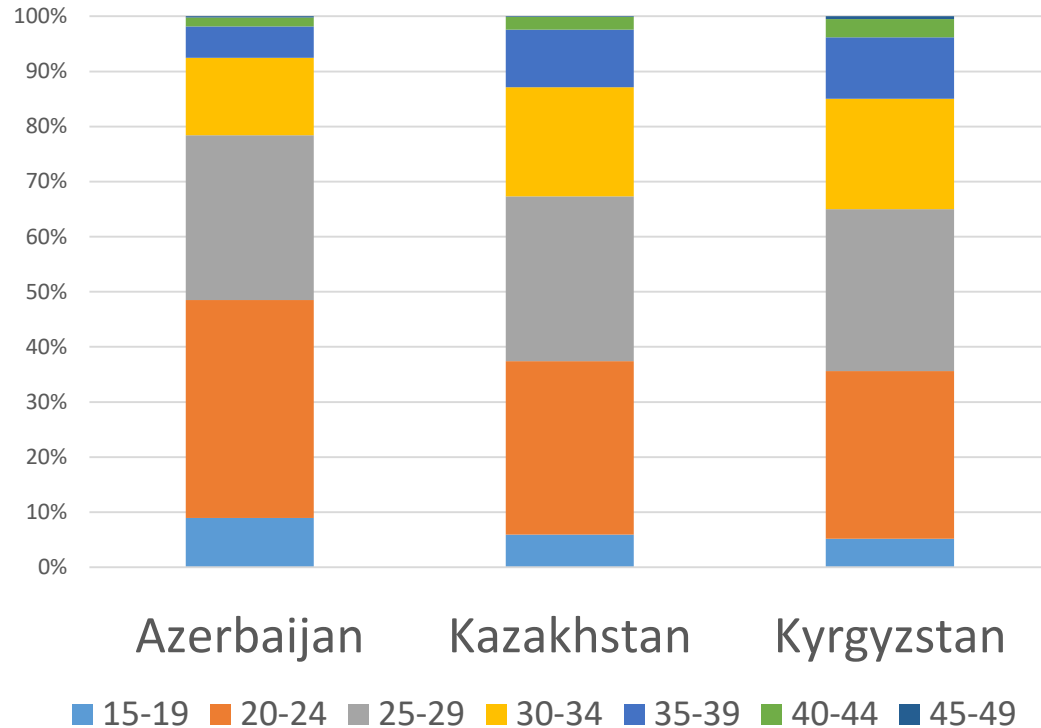
TFR in Azerbaijan, Kazakhstan and Kyrgyzstan, 2000-2015



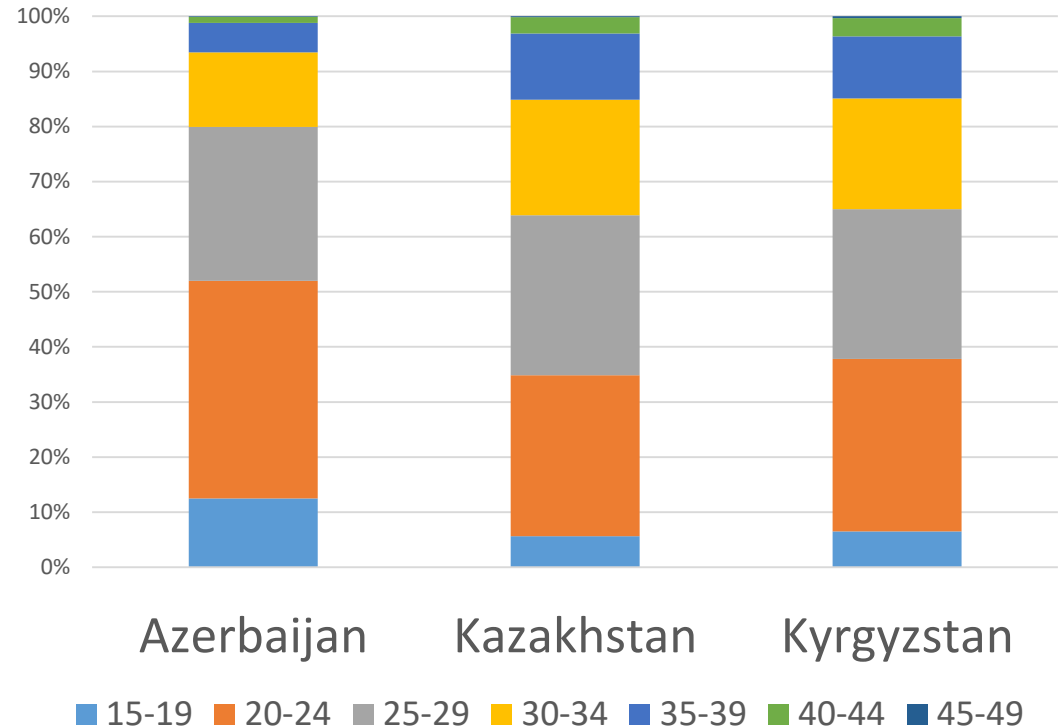
Source: national statistic offices

Inputs of age groups to TFR: Azerbaijan, Kazakhstan and Kyrgyzstan (%)

2004-2006

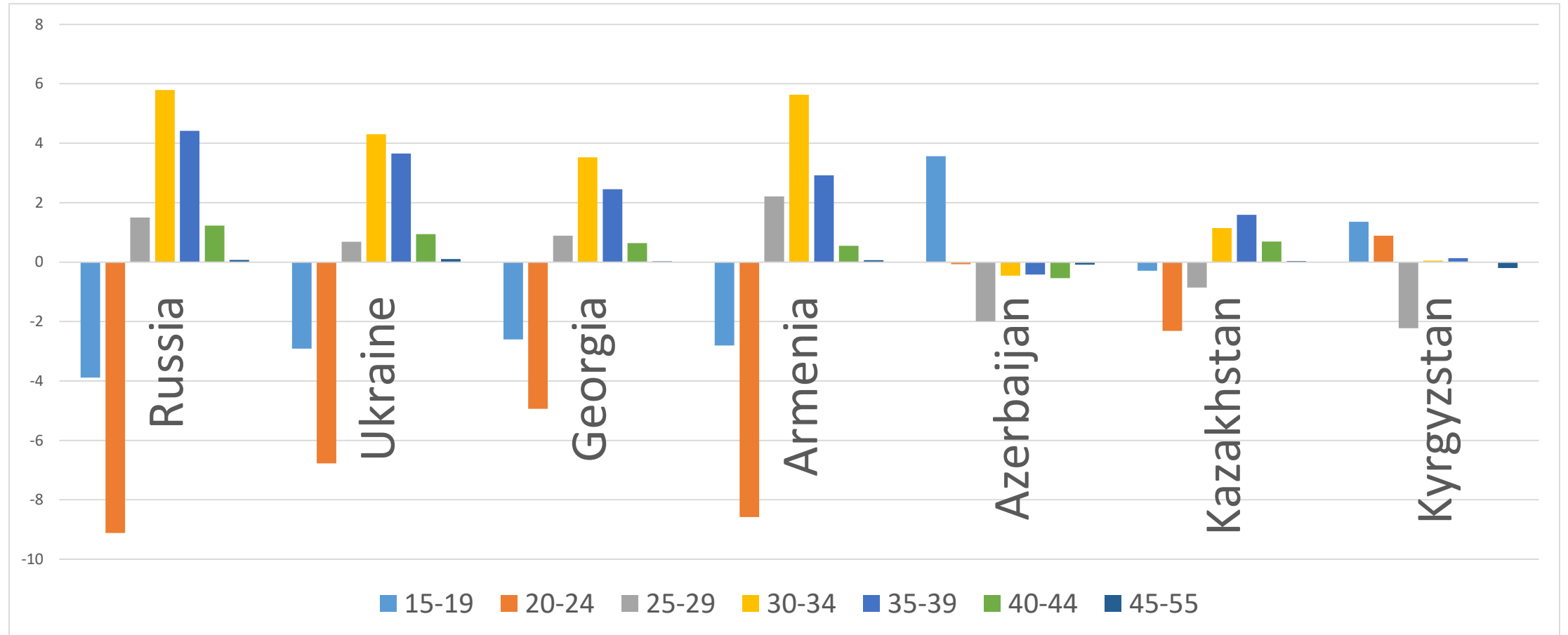


2014-2016



Source: national statistics offices

Differences in proportions of inputs of age groups to total fertility between 2004-2006 and 2014-2016 in some post-Soviet countries



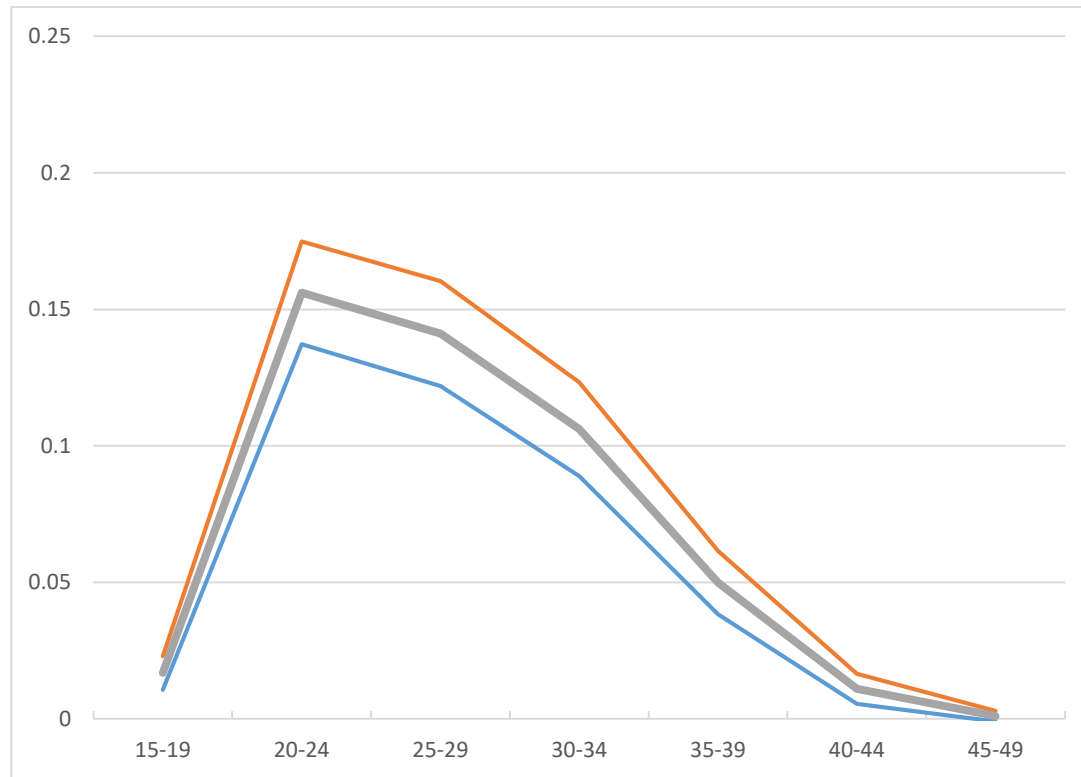
The lack of fertility 'eldering' in Azerbaijan, Kazakhstan and Kyrgyzstan: why not a statistic artefact?

- No effect of decrease of input of elder age groups due to TFR lowering, typical e.g. for the First Demographic Transition: TFR actually was increasing between mid-2000s and mid-2010s;
- No growth in proportion of social groups for which younger fertility is expected (rural; low educated) between mid-2000s and mid-2010s (World Bank data)

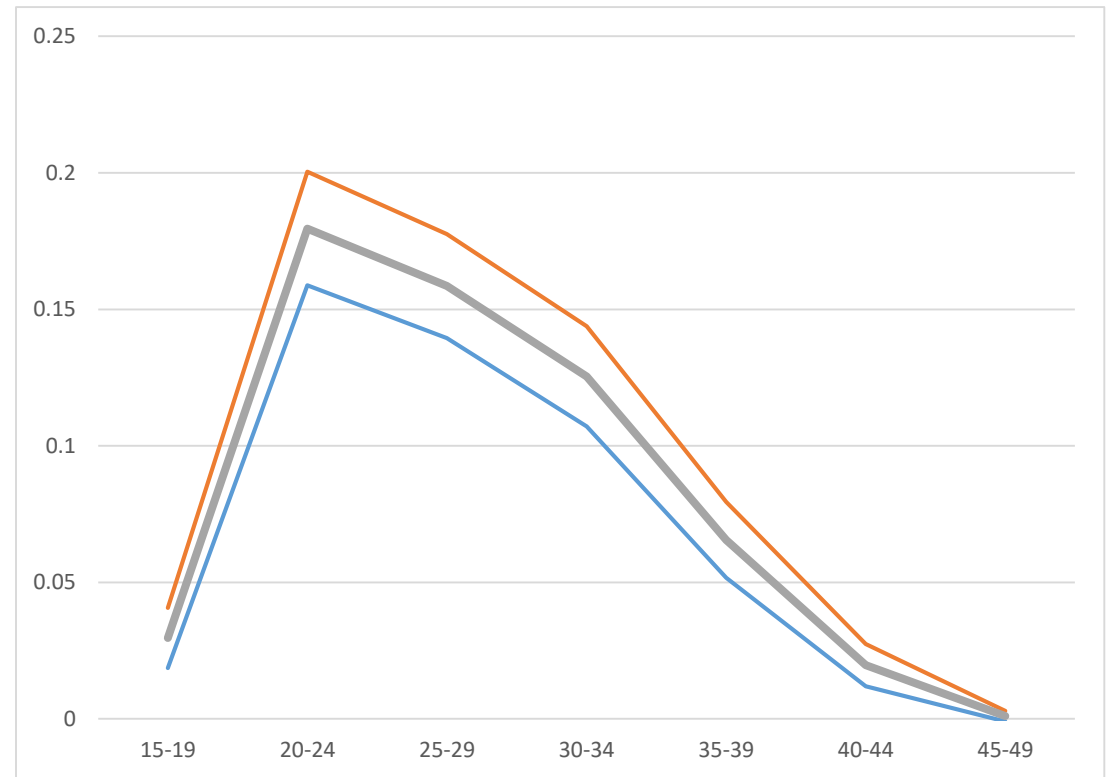
2.Evidence for asymmetries between
'Muslim' peoples and peoples of other
religious affiliation within a country

Kazakhs vs. Russians in Kazakhstan

ASFRs for ethnic Kazakhs (predominantly Muslims), Kazakhstan, 2006



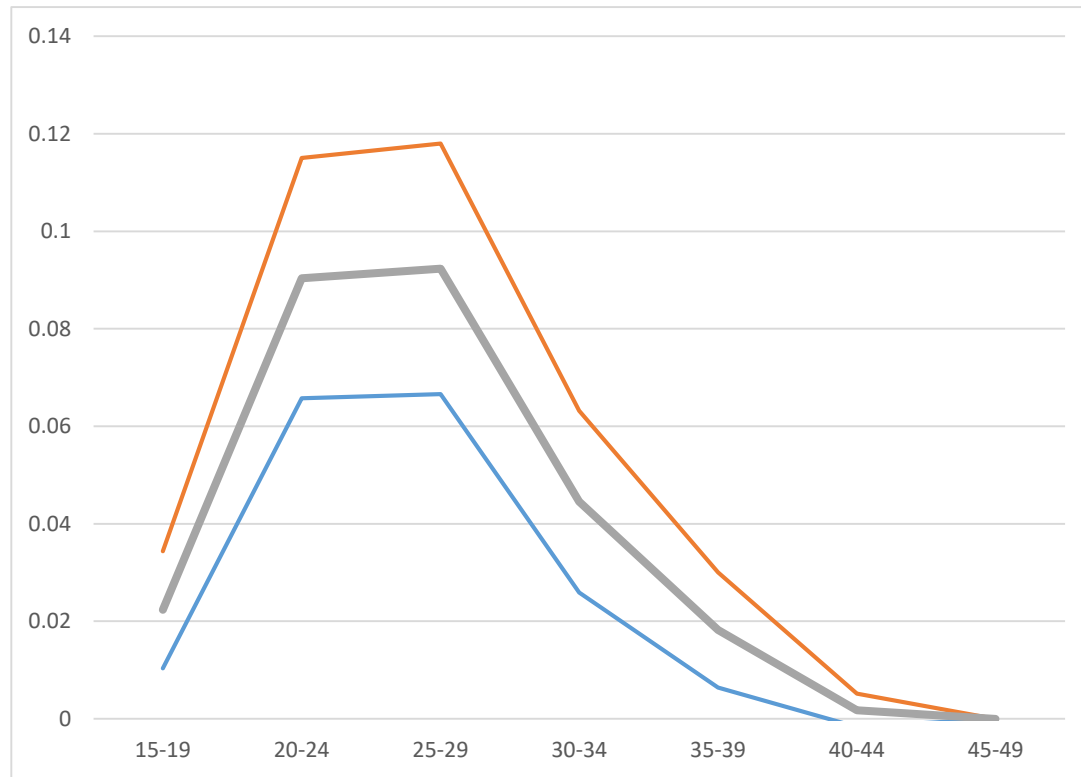
ASFRs for ethnic Kazakhs, Kazakhstan, 2015



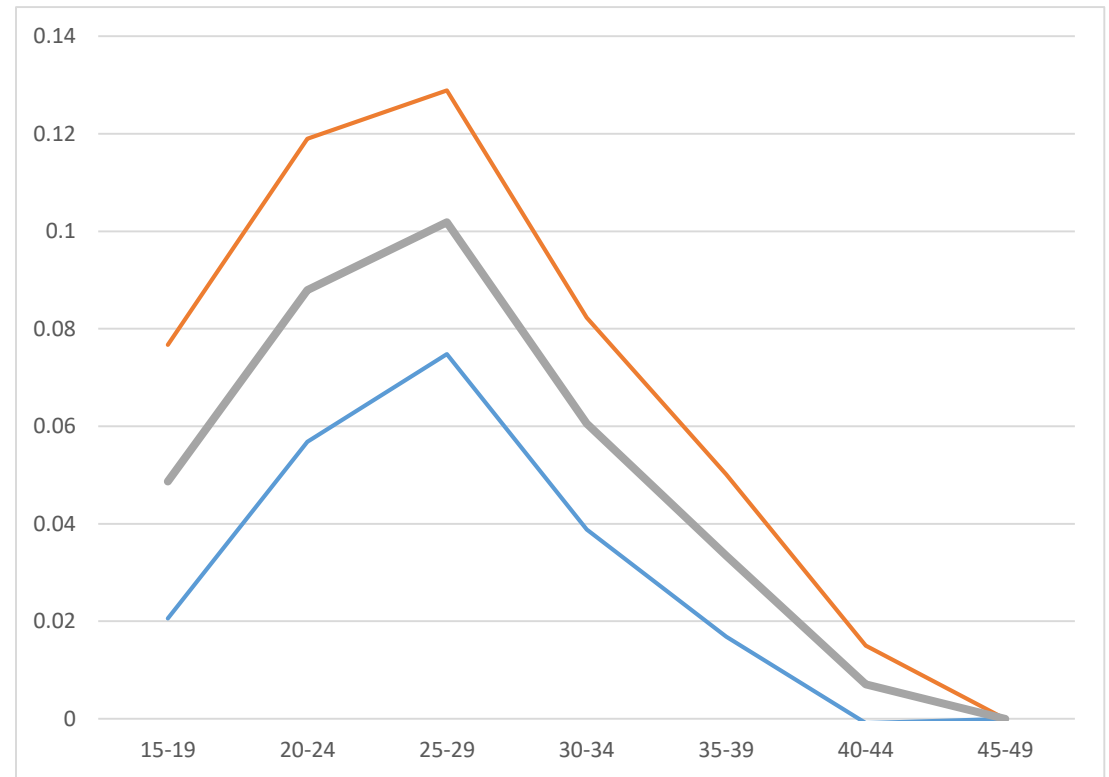
Source: UNISEF MICS 2006 and 2015; 95% confidential intervals

Kazakhs vs. Russians in Kazakhstan

ASFRs for ethnic Russians (predominantly Christians), Kazakhstan, 2006



ASFRs for ethnic Russians, Kazakhstan, 2015



(+similar asymmetries between **Russians** and **Kyrgyzs** according to MICS 2005-2006 and MICS 2014 for Kyrgyzstan)

North Caucasus (Russia)



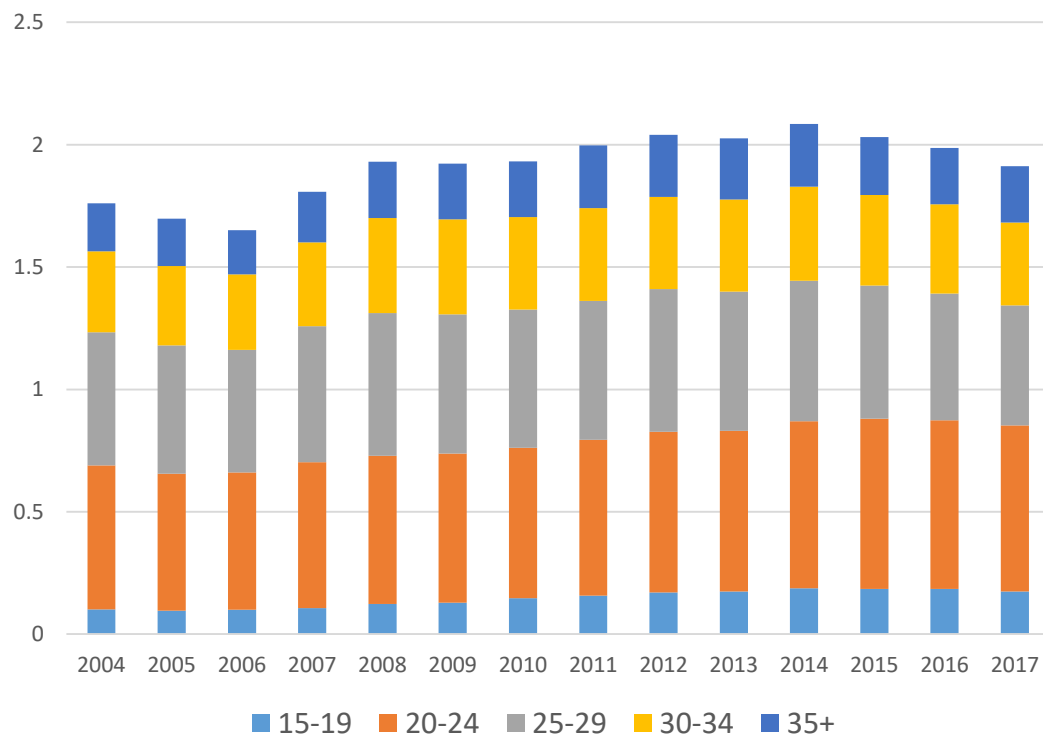
North Caucasus (Russia)

Regions of North Caucasus with Muslim ethnic groups (minorities at the country level) forming the majority: Chechnya, Daghestan, Ingushetia -

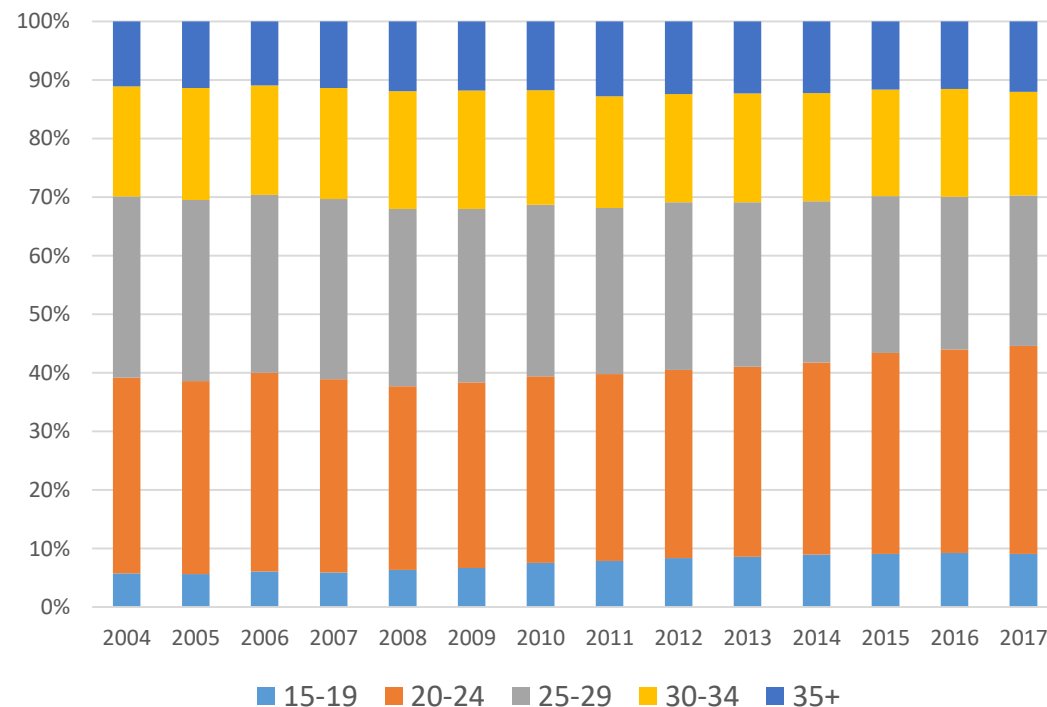
- Lack of postponement (Kazenin, Kozlov 2016);
- Survey evidence for cultural correlates of MAB1.

Republic of Daghestan (North Caucasus)

TFR with inputs of age groups, 2004-2017



Inputs of age groups to TFR, 2004-2017, %



Source: Russian National Statistic Agency, *Russian Fertility and Mortality Database*.

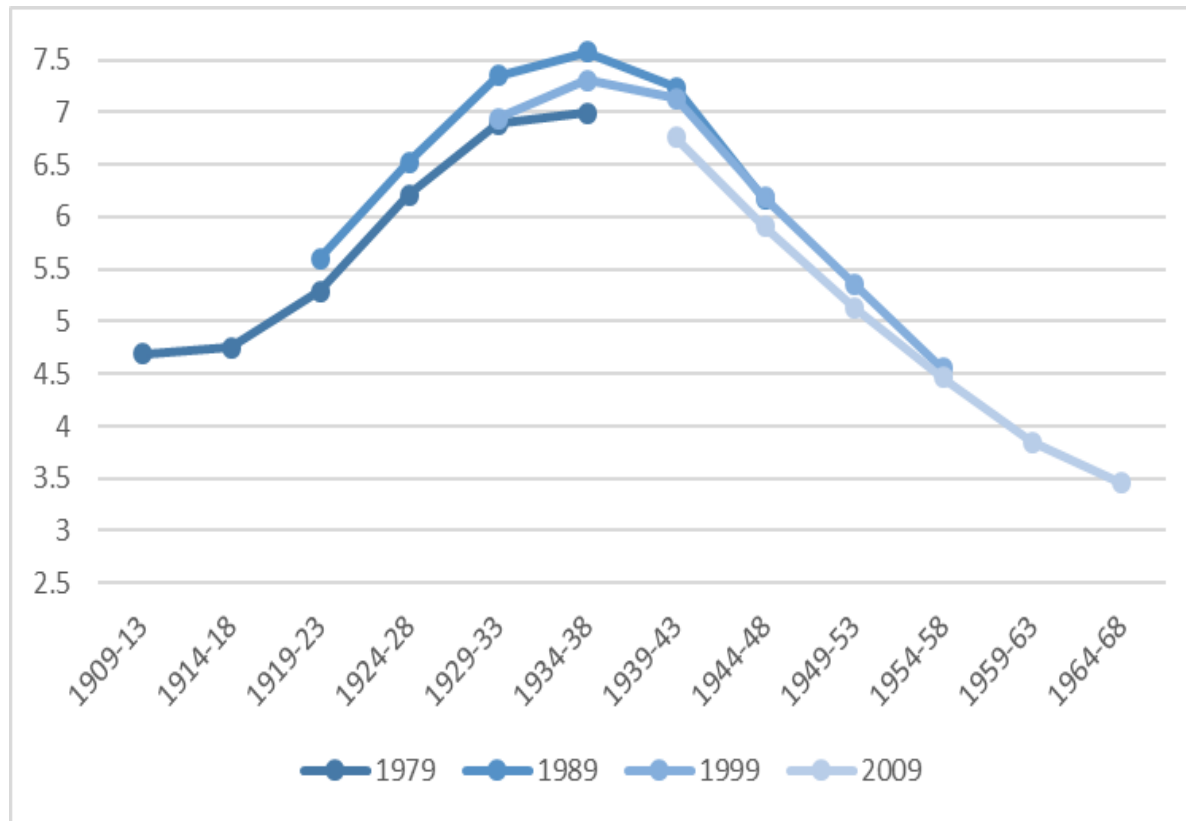
Survey evidence: Daghestan

- Survey of 1015 women between 16 and 39, May-June 2018
- Analysis: linear regression with age at 1st birth as the dependent
- Significant dichotomic parameters (robust under control for age, education, rural/urban, etc.) with NEGATIVE relation to woman's age at 1st birth:
 - lack of woman's autonomy to take a job, to purchase expensive goods;
 - woman's living in a 'big family', with parents-in-law (cf. Caldwell 1987 on family traditionalism supporting higher fertility among Muslims).
- No significance: education (endogenous??); personal religiosity.

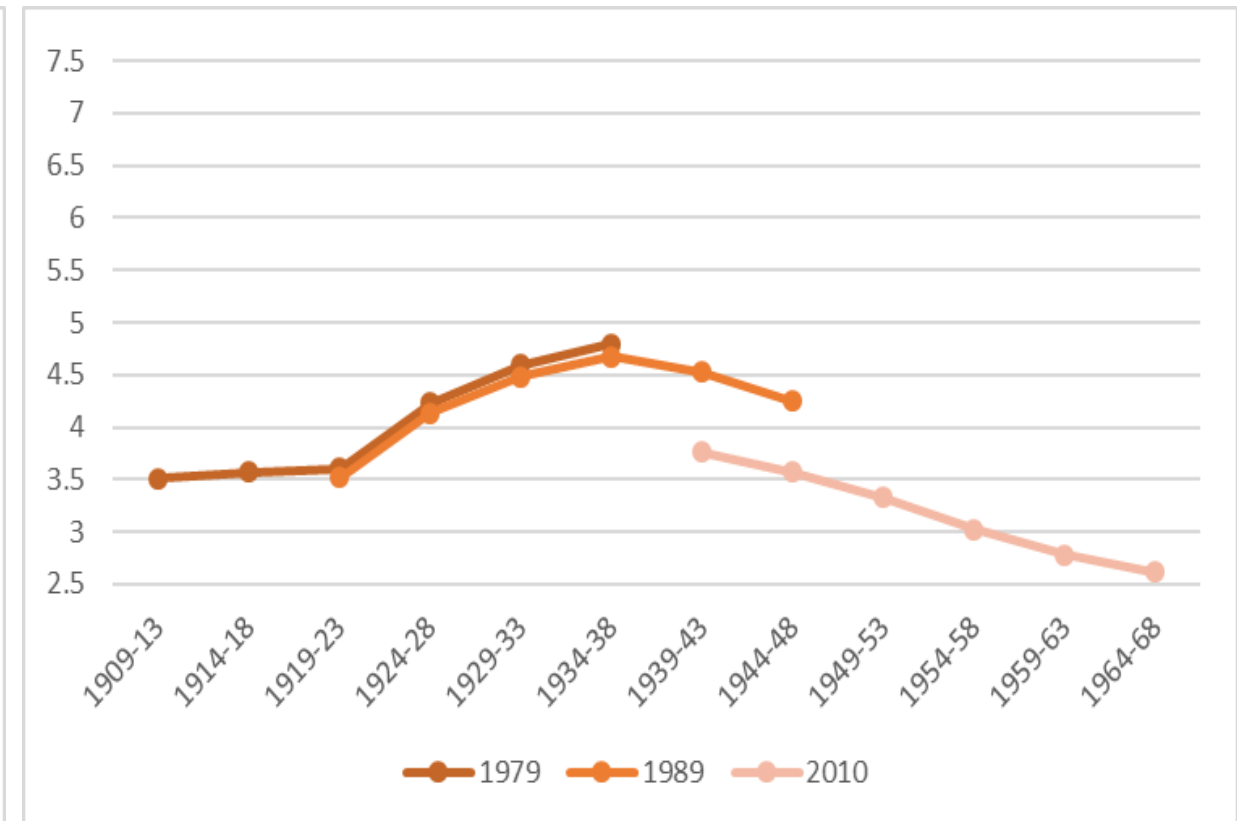
3. The cohort view

Background: completed birth cohort fertility for some Muslim peoples of post-Soviet countries

Kyrgyzs (Kyrgyzstan)



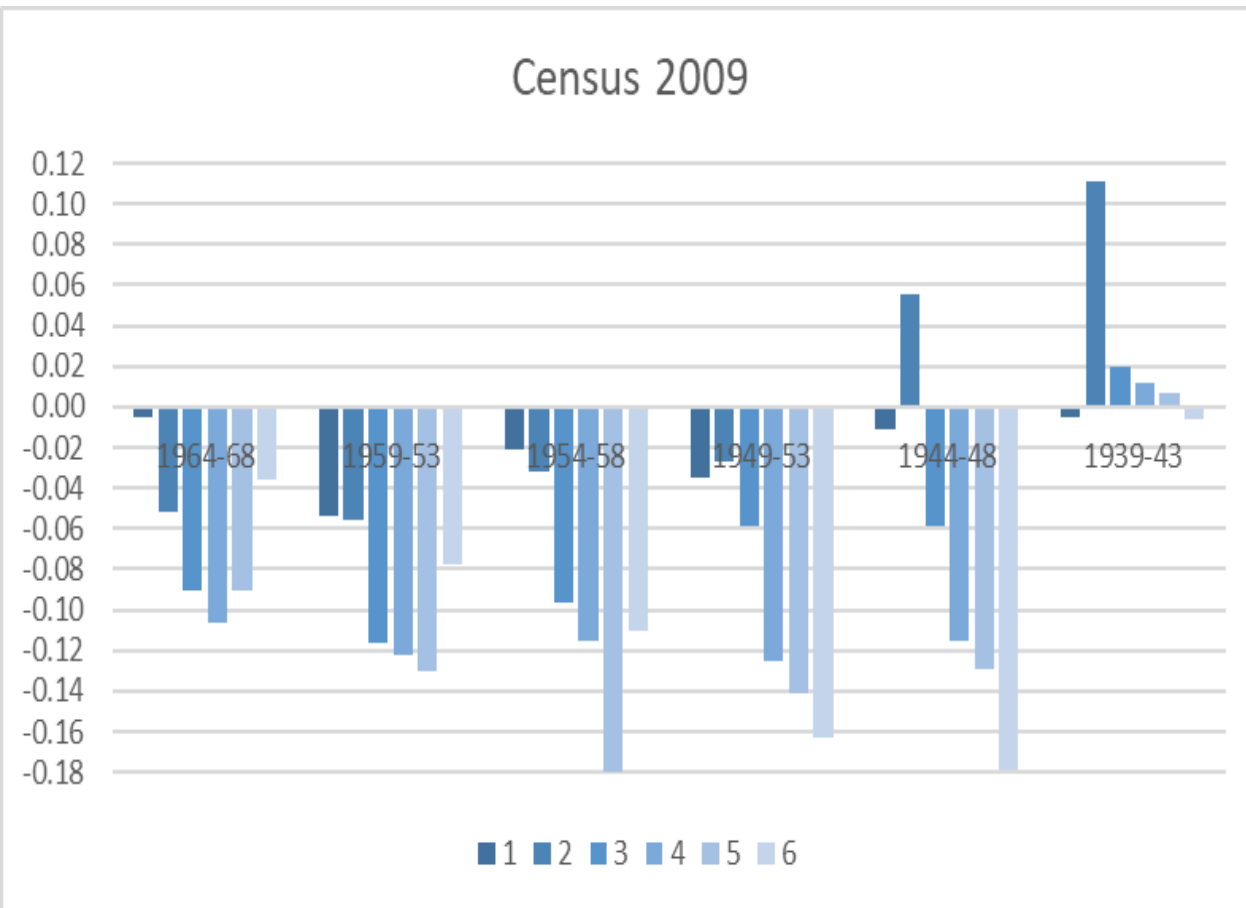
Avars (Daghestan, North Caucasus, Russia)



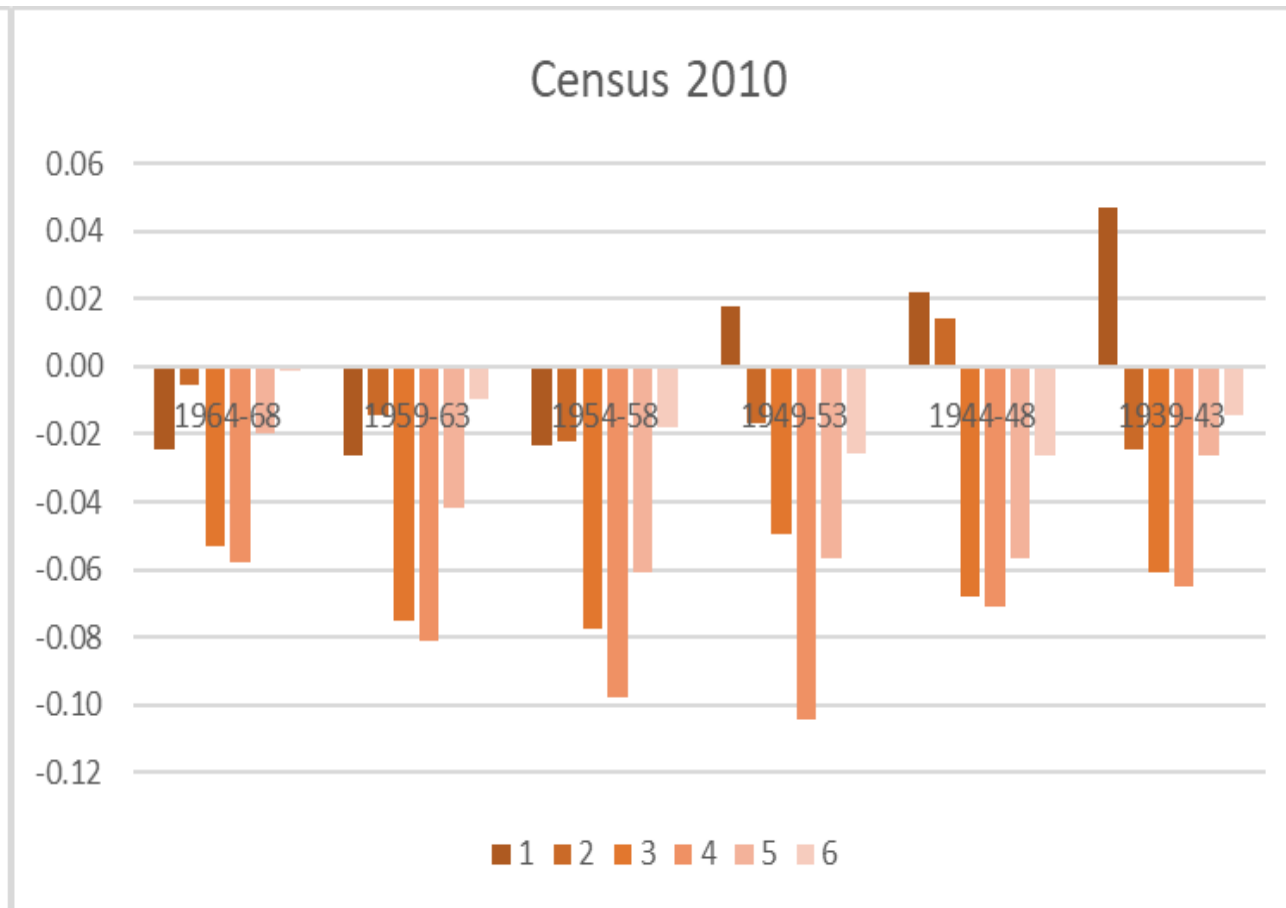
Sources: Soviet Censuses 1979, 1989; Kyrgyzstan Censuses 1999, 2009 (Kyrgyzs); Russian Census 2010 (Avars)

Background: decomposition by parities (method of Zeman et al. 2018)

Kyrgyzs (Kyrgyzstan)



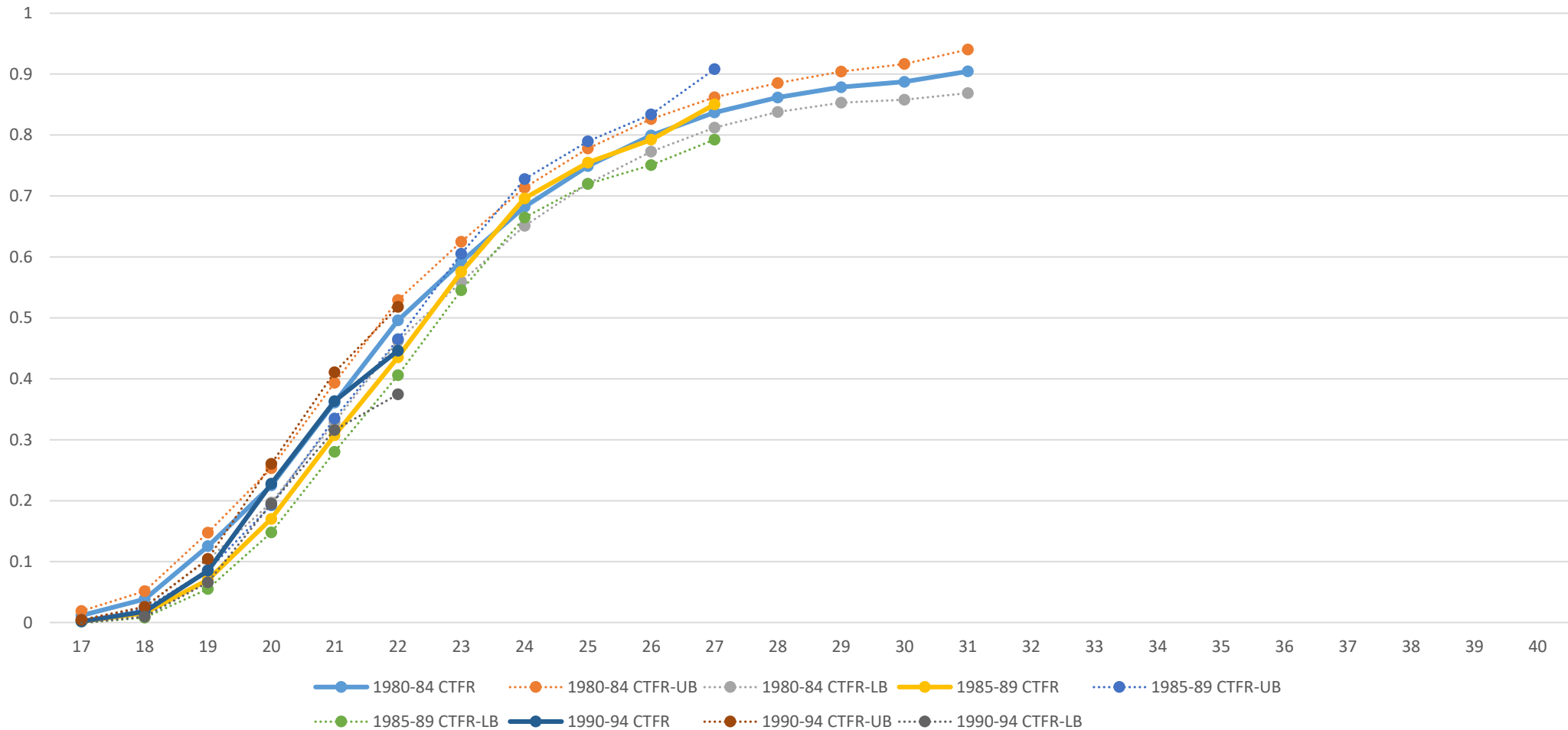
Avars (Daghestan, North Caucasus, Russia)



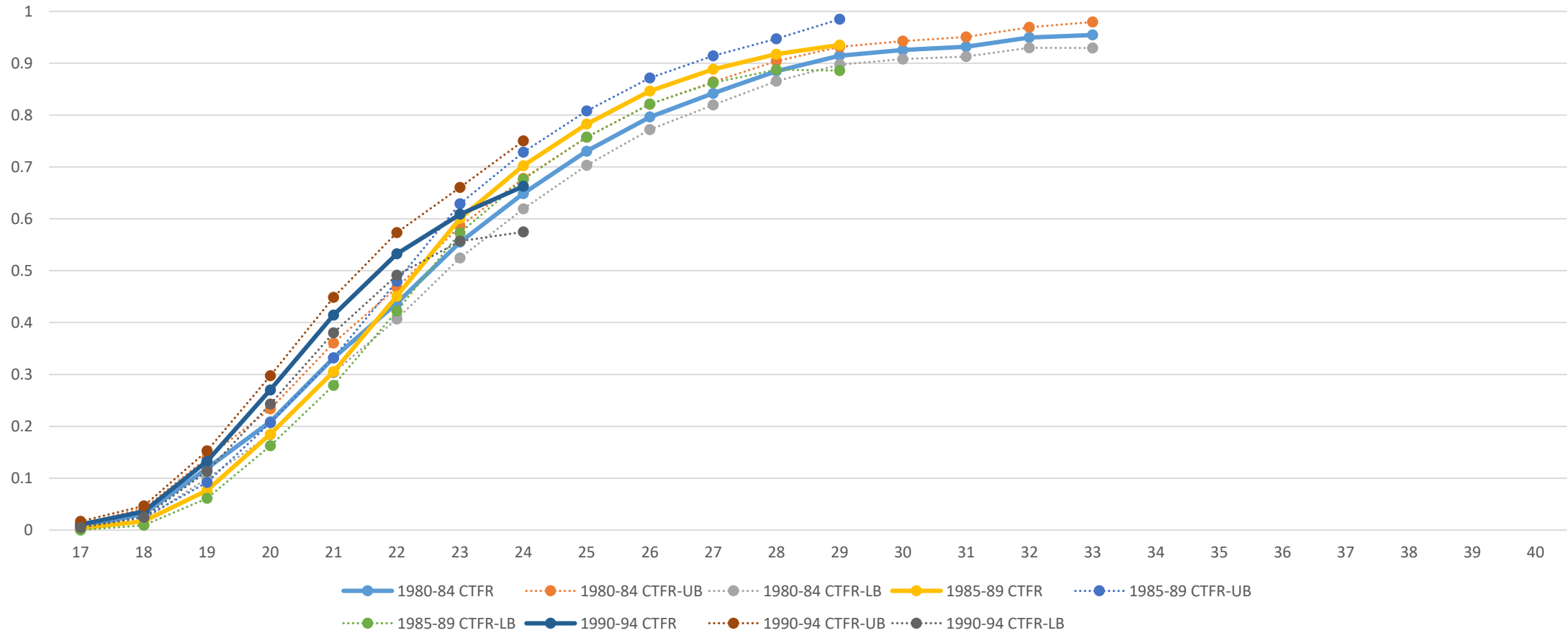
Kyrgyzs of Kyrgyzstan

- DHS 2012: the 1985-89 cohort postpones 1st birth compared to the 1980-84 cohort, but the 1990-94 cohort is closer to the 1980-84 cohort;
- UNICEF MICS 2014: until age 23, the CFR1 of the 1990-94 birth cohort is higher than of the preceding ones.

Kyrgyzs of Kyrgyzstan: age-specific CFRs, 1st child, birth cohorts 1980-84, 1985-89, 1990-94 (DHS-2012)



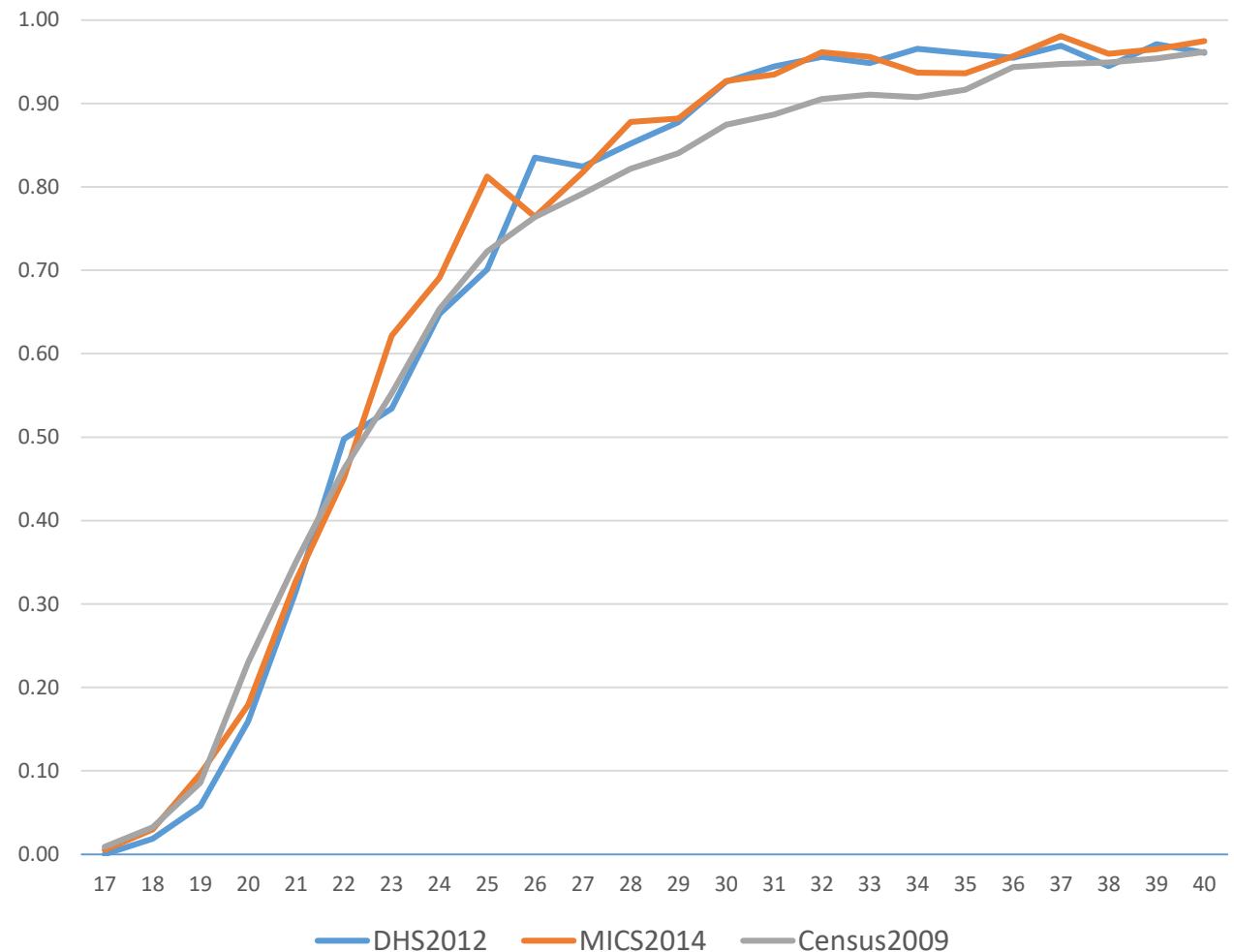
Kyrgyzs of Kyrgyzstan: age-specific CFRs, 1st child, birth cohorts 1980-84, 1985-89, 1990-94 (MICS 2014)



Possible alternative account of the lack of postponement in the youngest cohort:

The surveys underestimate the proportion of childless women because of migration?

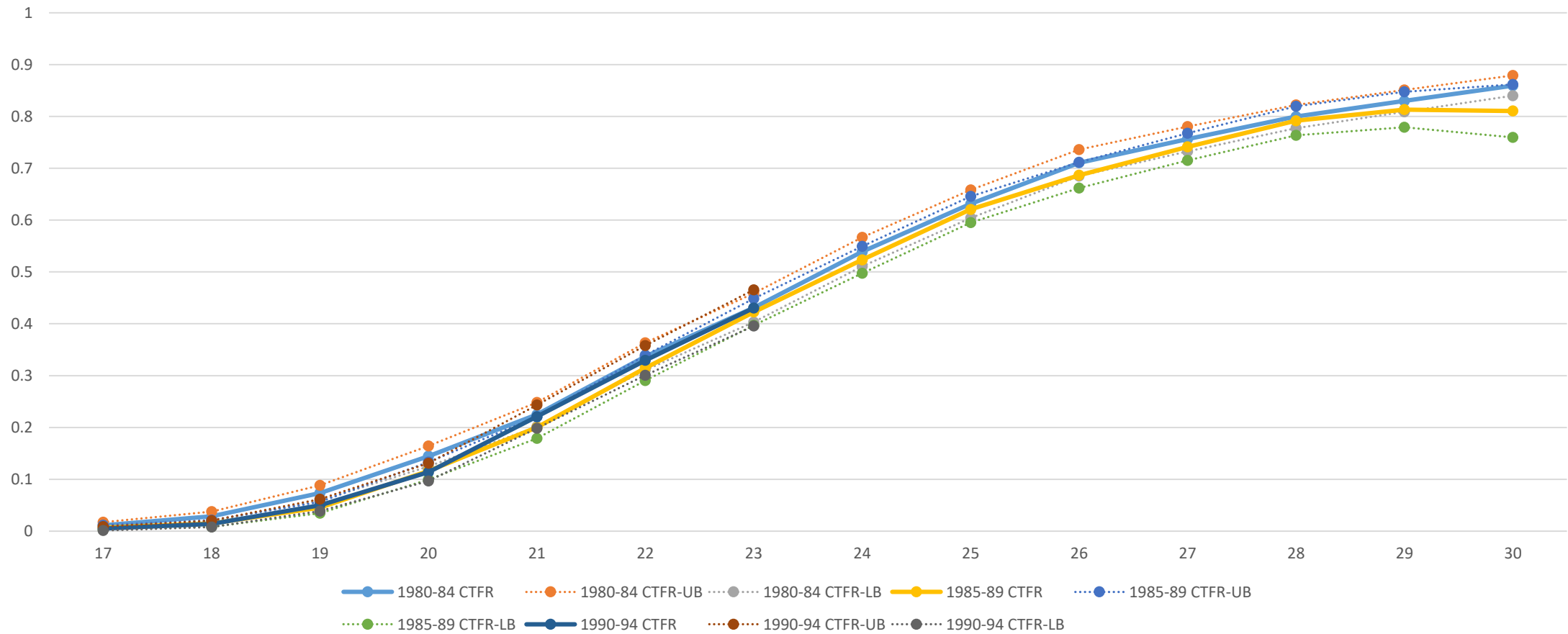
Cf. age-specific 1st birth fertility rates among Kyrgyzs of Kyrgyzstan in 2009 according to Census 2009, DHS2012 and MICS 2014.



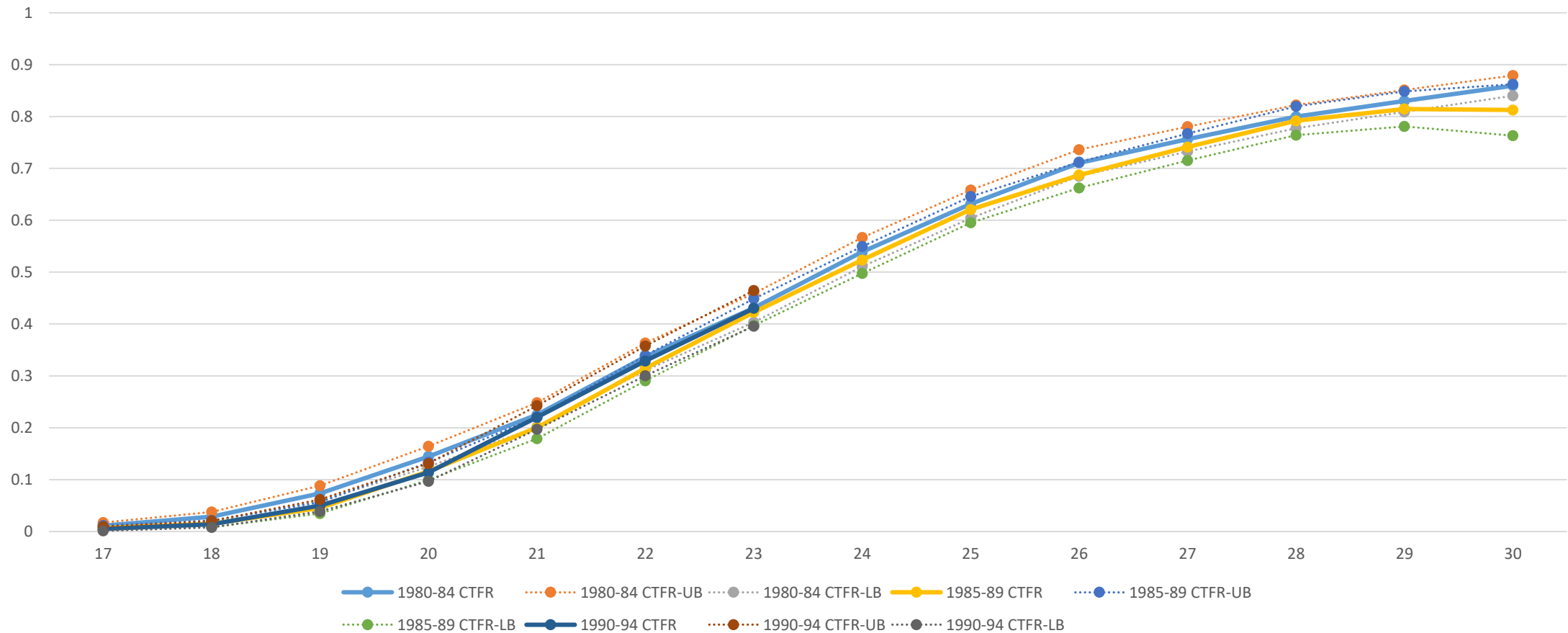
Kazakhs of Kazakhstan:

DHS (2015) and MICS (2015): insignificant differences between the 1980-84, 1985-89 and 1990-94 birth cohorts in age-specific CFRs.

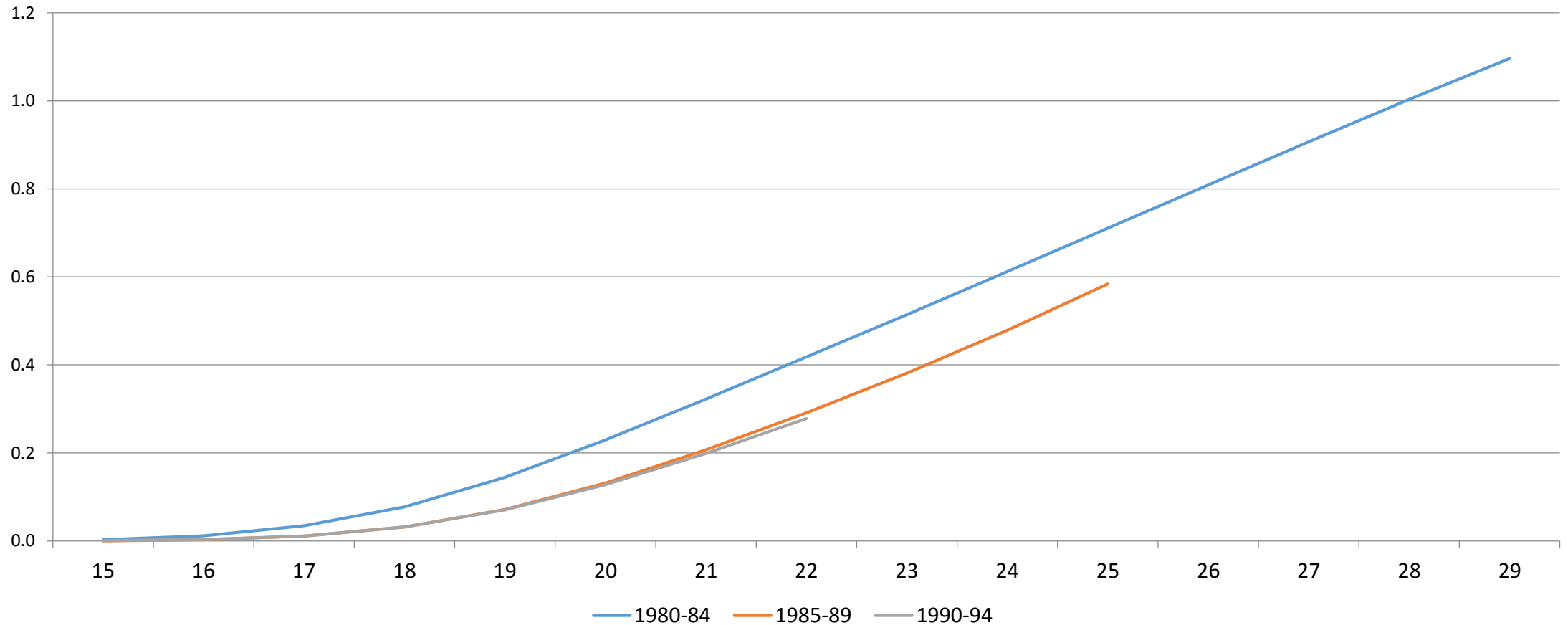
Kazakhs of Kazakhstan: age-specific CFRs, 1st child, birth cohorts 1980-84, 1985-89, 1990-94 (DHS 2015)



Kazakhs of Kazakhstan: age-specific CFRs, 1st child, birth cohorts 1980-84, 1985-89, 1990-94 (MICS 2015)



Russia: age specific CFRs, 1st child, birth cohorts 1980-84, 1985-89, 1990-94



Source: HFD

Further research

- Social and cultural correlates of earlier motherhood for larger population groups in the Post-Soviet countries/regions without postponement (based on DHS, MICS and our own surveys).

Selected references

- Agadjanian, V., Dommaraju, P., Nedoluzhko, L. (2013) Economic fortunes, ethnic divides, and marriage and fertility in Central Asia: Kazakhstan and Kyrgyzstan compared. *Journal of Population Research*, vol.30, no.3, p. 197-211.
- Avdeev, A. (2015). *Population Situation Analysis: Beyond the Demographic transition in Azerbaijan*. Baku: UNFPA/UNDP.
- Billari, F.C., Liefbroer, A.C., Philipov, D. (2006) *Vienna Yearbook of Population Research*. Vol. 4, PostThe Postponement of Childbearing in Europe: Driving Forces and Implications. ponement of Childbearing in Europe, p. 1-17.
- Caldwell, J. C. (1986) Routes to low mortality in poor countries. *Population and development review*, 12(2): 171-220.
- Zeman, K., Beaujouan, E., Brzozowska, Z., Sobotka, T. (2018) Cohort fertility decline in low fertility countries: decomposition using parity progression ratios // *Demographic Research*, vol. 38, p.651-690.
- Kazenin, K., Kozlov, V. (2016) The rejuvenation of motherhood in Daghestan: a trend or an artifact? (Preliminary results of a rural population survey). *Demographic Review 2016* (English selection), pp.161-181.
- Perelli-Harris, B. (2008) Ukraine: on the boarder of old and new uncertain times // *Demographic Research*, vol.19, p. 1145-1178
- Spoorenberg, T. (2017) The onset of fertility transition in Central Asia. *Population-E*, vol. 72, no. 3, pp. 473-504.
- Spoorenberg, T. (2017) After fertility's nadir? Ethnic differentials in parity-specific behaviours in Kyrgyzstan. *J.Biosoc. Sci.*, vol.49, p.S62-S73.
- Zakharov, S. (2008) Russian Federation: From the first to second demographic transition. *Demographic Research*, vol.19, art. 24, p. 907-972.

Thank you!