

Identifying Attributable Risk Factors of Age-Specific Mortality in Older Children and Adolescents

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Considerable research has been invested into estimating and understanding the determinants of mortality in children under-five. Mortality for older children and adolescents has remained understudied by comparison. Consequentially, recent decades have seen progress in reducing under-five mortality, whilst mortality improvements in children over five have stagnated. This has shifted the burden of mortality into older age groups including older children and adolescents. Additionally, recent adjustments to all-cause mortality models have revealed a history of underestimation in adolescents/young adults (GBD 2023, 2025) thus motivating the need for further investigation. This work focuses on identifying the effects of mortality differentials across the DHS. We utilised mainly socio-demographic index (SDI) indicators including residence location, mother's age at birth, education of mother & wealth quintile. Our approach involved reconstructing birth histories across the most recent DHS for each country, split by age group up to fifteen. Survivorship was regressed against differentials, accounting for interactions with age. Rate ratios were calculated within each age group comparing categories expected to have lower mortality risk (e.g., urban residence, higher wealth index) with their counterfactual. Preliminary results revealed a decreasing contribution of SDI differentials towards mortality as age increases beyond five years. At older ages, greater significance was associated with maternal education followed by wealth index and residence location across the DHS. Further study will aim to understand the interplay between different covariates on mortality at older ages. We expect some interrelation of mortality effects between correlated variables albeit with similar declining significance as age increases.

keywords: Differentials, Over-5 Mortality, Older Children, Adolescents, Socio-Demographic Index

The Defenceless Child: Socio-Economic and Gender Differentiated Child Mortality Responses to Losing One's Mother in 19th Century Sweden

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This paper explores the effect on neonatal, post-neonatal, and child mortality of being a motherless child and the interaction this situation had with socio-economic status and gender in Sweden during the period 1790-1910. By being able to include interaction terms as compared to simply using controls/stratified samples, this paper contributes to existing literature by extending the analysis regarding which mechanisms that impacted the effect of maternal death. Using a longitudinal, individual level, database (SwedPop), covering large parts of the Swedish population, together with a Cox proportional hazards model, the study finds that the effect of maternal death during infancy was largest in the very early stages of life, primarily affecting children under the age of one. For those age 1-4 years, there was a lingering though largely reduced effect. These results give indications of the importance of breastfeeding for a child's survival chances at the time. But while nursing was difficult to transfer quickly, other childcare practices could be taken over by for example a grandmother. Preferences regarding which child to take care of can however be sensed as the effect of losing one's mother, during infancy, seems to have been significantly worse for girls than boys, indicating gender differentiated socio-cultural practices in a nation yet to be large-scale industrialized and modernized. Scattered results regarding socio-economic status indicate an effect in favour of children within non-manual occupation families, but the effect, if any, seems to have been small compared to the baseline hazard related to the loss of the mother.

keywords: Maternal death, child mortality, socio-economic status, gender, 19th century Sweden

Regional Prevalence and the Individual Demographic and Socioeconomic Factors Associated with Obstetric Fistula risk among Women in Uganda over time (2006–2016)

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Obstetric fistula constitutes severe manifestations of maternal morbidity, emblematic of entrenched inequities in reproductive health systems., particularly in sub-Saharan Africa. While Uganda has seen a national decline in fistula prevalence from 3.2% in 2006 to 1.6% in 2016, regional and

socio-demographic disparities persist. This study analyzes data from three Uganda Demographic and Health Surveys (2006, 2011, 2016), encompassing 30,442 women aged 15–49, to examine temporal trends and individual-level risk factors associated with obstetric fistula. Guided by the Three Delays framework, we explore how delays in seeking, reaching, and receiving care contribute to fistula risk. Multivariate logistic regression reveals that women in Western and South Western Uganda consistently face elevated odds of fistula, underscoring geographic barriers to emergency obstetric care. High parity (≥ 10 births), older maternal age (45–49 years), widowhood, low education, and engagement in agriculture or informal labor significantly increase risk. Notably, women with higher education and those in wealthier households show reduced odds, though protective effects diminish over time. Paradoxical findings—such as increased risk among women reporting empowerment or proximity to health facilities—highlight systemic gaps in care quality and service delivery. These findings emphasize the need for dual-level policy responses: macro-level investment in health infrastructure targeting underserved regions, and micro-level interventions promoting education, delayed marriage, and economic empowerment linked to quality care. Achieving Uganda’s goal of eliminating obstetric fistula by 2030 demands addressing both structural and individual vulnerabilities. This study contributes critical population-level evidence to inform equitable maternal health strategies across sub-Saharan Africa.

keywords: Obstetric fistula, Uganda, prevalence, Demographics

Sick and Sad: A Multistate Analysis of Chronic Conditions and Depression Onset Among Aging Adults in Europe

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Population ageing in Europe has intensified concerns about multimorbidity and its mental health consequences. This study examines the how chronic conditions affect the onset of depression on mid- and older adults. Using data from the Survey of Health, Ageing and Retirement in Europe (SHARE) waves 4-9 (2011-2022), we apply continuous-time multi-state models to analyze transitions between depression states (with/without depressive symptoms) European countries among people with and without chronic conditions. Depression is measured using the EURO-D scale (≥ 4 indicating significant symptoms); chronic conditions are assessed through physician-diagnosed diseases at baseline. We estimate time spent in each state (with and without depression) from age 50, stratified by chronic condition status and gender. We consider socioeconomic and health factors as mediators and moderators of the chronic condition-depression relationship. Chronic conditions significantly increased the risk of depression onset by 24% among men and 41% for women. They also live a higher proportion of years with depression, compared to those with no chronic conditions at baseline (11.6% vs. 8.4% for men, 20.4% vs. 15.8% for women). Functional limitations and chronic pain mediate this relationship, while physical activity and social participation are associated with lower incidence of depression. Women live longer but spend greater proportions of life with depression.

keywords: Chronic conditios, Depression, Multistate modelling, Europe

Gender Inequalities in Outsourcing Domestic Work during Widowhood : Economic Constraint or Competence Deficit ?

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Although shaped by economic resources and gendered household labor, little is known about how widows and widowers outsource domestic work to cope with everyday life before and following spousal death. Three research questions are addressed: How does the probability of outsourcing domestic work change across the widowhood process? Are there gender differences? Do these gender differences vary across welfare regimes? Using data from the Survey of Health, Ageing, and Retirement in Europe (SHARE) and fixed-effects regressions, we estimate changes in outsourcing domestic chores, meal preparation, and personal care up to five years before and after spousal death, by gender. The probability of outsourcing rises in the year of spousal death and continues to increase thereafter. Widowers are considerably more likely to outsource than widows, reflecting men’s lower

domestic experience and women's economic hardships. The gender gap is substantial in Nordic and Continental Europe, but largely absent in Southern European countries.

keywords: Widowhood, care, gender, inequalities

Demographic aging of physicians in Czechia between years 2014 and 2022

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Demographic aging is a topic, that especially since the turn of the millennium, is increasingly resonating in professional and laical society. It is thus a current topic affecting everyday life, but at the same time it plays an important role in the future functioning of society, as well as it has (or will have) an impact on various aspects of public life. The aim of this study is to analyze the level of demographic aging among primary care physicians in Czechia between years 2014 and 2022 using alternative approaches to demographic aging. The study uses calculated working life expectancy tables and could give an idea of how "old" the system of Czech primary care physicians is.

keywords: demographic aging, Czechia, physicians, alternative indicators, primary care

Parental Separation and Children's Life Trajectories: A Cross-Country Analysis of Educational and Occupational Outcomes

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This study examines the heterogeneous impact of parental separation on children's educational and occupational outcomes across European countries and birth cohorts. Using data from the 2019 and 2023 waves of the Intergenerational Transmission of Disadvantages Ad Hoc Module of the European Union Statistics on Income and Living Conditions (EU-SILC), it adopts a comparative perspective to analyze how the effects of family disruption vary by social origin, country, and cohort. A multilevel modeling strategy is applied to assess life trajectories, accounting for both individual and contextual factors. The analysis focuses on how the divorce penalty across different outcomes varies by social background. The effect is expected to be stronger among children from more privileged families when considering tertiary education attainment, as they have more resources to lose following separation. The study further extends existing research, which has mostly focused on educational outcomes, by examining occupational trajectories. Preliminary findings suggest that the occupational penalty of parental separation is largely mediated by respondents' educational level, although cross-country and cohort variations remain to be tested. Drawing on the Second Demographic Transition framework, the study also investigates how the diffusion and social acceptance of divorce shape these patterns. Evidence from previous research suggests that in countries and cohorts where divorce is more prevalent and socially accepted, inequalities between children from intact and separated families may persist or even widen. By integrating social, institutional, and demographic dimensions, this research contributes to understanding how family instability affects intergenerational inequality in contemporary Europe.

keywords: Parental separation, Education, Occupation, Social origin, Cross-country comparison

Pre-retirement working conditions and long-term care (LTC) need for 80+ in Germany

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This study investigates how pre-retirement working conditions are associated with the likelihood of long-term care (LTC) need among those aged 80 and above in Germany. Drawing on the stress process model, it explores how differential exposure and vulnerability to adverse working conditions contribute to inequalities in late-life dependency. Using data from the "Old Age in Germany (D80+)"

survey (N = 8,110), we linked respondents' last occupations to gender-specific, occupation-level indicators of working conditions from the BIBB/BAuA Employment Survey. Four working conditions were analyzed—time stress, physical demand, cognitive demand, and hazardousness—across gender and educational groups using linear probability models. Results show that cognitively demanding work is associated with a lower probability of requiring LTC among middle-educated women and men, as well as high-educated men. In contrast, physically demanding work predicts higher LTC need for low- and middle-educated women. Time stress and hazardousness were not significantly related to LTC need. The findings underscore persistent social inequalities in the long-term consequences of employment conditions: physical strain disproportionately affects women with lower education, while cognitive stimulation benefits those with higher education. These patterns reflect both unequal exposure to occupational risks and differential vulnerability to their long-term health impacts. Even decades after retirement, the legacy of working life remains visible in late-life care dependency, emphasizing the importance of improving working conditions as a preventive strategy for reducing LTC inequalities in aging societies.

keywords: gender, education, inequality, health, aging

Understanding the Deficit of Daughter-Only Families in South Asia: A Measure of Prenatal Discrimination Behaviors Using Fertility Tables.

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South Asian demography is characterized by a daughter-only families (DOFs) deficit compared to a theoretical level. This deficit is explained by the son preference, manifested through two fertility behaviors: the male-preferring stopping rule of childbearing and the prenatal sex selection (PSS). However, no prior research quantified the respective contributions of PSS and the preferential stopping rule on the DOFs deficit. Measuring prenatal discrimination behaviors behind this deficit can represent forms of resistance to the emergence of these families in societies as the increase in DOFs (due to declining fertility), could challenge patrilineal systems. This work proposes therefore a novel methodological framework to quantify the DOFs deficit due to PSS and to the stopping rule. Using fertility tables, I construct "son preference behaviors-deleted" tables to measure the gain in DOFs proportion that a population could have when certain fertility strategies are deleted. A fictive population is calculated under different scenarios to quantify prenatal discrimination behaviors' effect on siblings' gender composition. I use DHS data, from India, Nepal, Pakistan, and Bangladesh, i.e., countries experiencing different demographic manifestations of son preference. Two scenarios are considered: (1) "only stopping rule" and (2) "no son preference". These scenarios measure family compositions when the PSS and stopping rule are deleted and therefore represent how they are impacted by prenatal discrimination. Results demonstrate that India and Nepal have the highest DOFs deficit explained by PSS. On the opposite family compositions in Bangladesh and Pakistan are mainly impacted by the stopping rule.

keywords: Daughter-only families, son preference, prenatal sex selection, preferential fertility, fertility tables

Telehealth and Ethnic Inequalities in the United States: Examining the Association Between Telehealth Use and Self-Rated Health Among Older Adults

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The rapid expansion of telehealth services has been widely recognized as a key innovation to improve healthcare access, particularly for older adults and other vulnerable populations. Yet, empirical evidence on whether these technologies contribute to reducing health inequalities remains limited. This study investigates the association between telehealth use and self-rated health among older adults in the United States, with a focus on racial and ethnic disparities. Using cross-sectional data from the 2023 National Health Interview Survey (NHIS), the analysis includes approximately 9,500 respondents aged 65 and over. Logistic regression models are employed to estimate the relationship between telehealth use (yes/no) and self-rated health (poor/fair vs. good/very good/excellent), controlling for demographic, socioeconomic, and health-related characteristics. Interaction terms between telehealth use and race/ethnicity are tested to explore potential heterogeneity in the association. Guided by Andersen's Behavioral Model of Health Services Use, the study conceptualizes

telehealth adoption as shaped by predisposing, enabling, and need factors. Findings will shed light on whether telehealth use is equitably distributed and whether its relationship with perceived health differs across racial and ethnic groups. By integrating a health inequality perspective into the study of digital health adoption, this research contributes to a broader understanding of the social determinants of telehealth use in later life and provides evidence relevant for policies aimed at promoting equitable access to digital healthcare among ageing populations.

keywords: telehealth, ethnic inequalities, older adults, self-rated health

Adult Children's Partnership Status and Access to Parental Support: Evidence from SHARE Wave 9

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Access to intergenerational support is a key factor shaping social inequalities among adult children. While partnered individuals benefit from pooled household resources, single adults may rely more heavily on parental transfers. However, it remains unclear whether they receive comparable levels of support. This research tests whether partnership status is associated with unequal access to financial, practical, and emotional support from parents. The research analyses parent-reported downward intergenerational transfers using SHARE Wave 9 (2021–2022) across European countries, classified into transfer regimes following Albertini & Kohli (2013): Nordic, Continental, Southern. Using two-level logistic regression models (children nested within parents) and controlling for transfer regime, the analysis estimates the association between partnership status and receiving parental support. Preliminary results indicate that unpartnered adults differ from partnered individuals in access to parental support, and that these differences vary by partnership history. These findings suggest that partnership status shapes access to family safety nets, with implications for understanding intergenerational stratification.

keywords: Intergenerational Support, Partnership Status, European Welfare Regimes, Social Stratification, Cross-National Comparison

Regional Heterogeneity and the Effectiveness of Training Policies for Older Unemployed Workers in Europe

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This study explores how regional institutional and socio-economic differences influence the success of training and reskilling policies for unemployed workers aged 50 and above in Europe. As Europe faces demographic ageing and shifting labor markets, supporting older workers' reintegration is increasingly vital. Yet, much research focuses on national-level welfare and labor market policies, neglecting important regional variations within multi-level governance systems. Drawing on welfare state theory and comparative political economy, the study situates regions as distinct institutional settings where administrative capacity, policy investment, and economic structure jointly affect the accessibility and impact of training programs for older unemployed individuals. It uses data from the European Labour Force Survey (2010–2023) combined with regional indicators on ALMP spending, unemployment benefits, retirement schemes, and institutional quality. Using a three-level longitudinal random effects model, the research examines individual, regional-year, and regional-level influences on participation in training initiatives. Findings reveal significant regional disparities even within similar welfare regimes. Regions with higher ALMP expenditure and stronger administrative capacity demonstrate greater training engagement. Conversely, regions with weaker institutions and higher unemployment show limited participation, indicating structural barriers to policy effectiveness. These disparities remain significant after controlling for individual factors such as education and unemployment duration, highlighting the critical role of regional governance and socio-economic context. The study challenges analyses limited to national frameworks by showing how regional conditions shape labor market outcomes. It also informs policy by emphasizing that effective training policies require adequate regional resources and institutional capacity. Overall, this research positions older workers' employability within a territorially embedded process shaped by multilevel governance, advancing understanding of how European welfare states can adapt and promote inclusion amidst demographic change.

keywords: Older workers; Regional heterogeneity; Reskilling; ALMPs; Europe

MIGRATION AND HOUSEHOLD POVERTY IN BURUNDI: A COMPARATIVE ANALYSIS OF HOUSEHOLDS WITH MIGRANTS AND HOUSEHOLDS WITHOUT MIGRANTS

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Persistent poverty has remained a real population problem and the fight against this scourge has been one of the priority axes of development policies in sub-Saharan Africa in recent decades. The Burundian government has committed to making Burundi an emerging country by 2040 and a developed country by 2060. The purpose of the vision is to make Burundi a nation characterized by the satisfaction of basic needs, the reduction of inequalities, unemployment and poverty in all its dimensions, etc. The objective of this study is to examine the effects of emigration on the level of poverty of households of origin of migrants in order to provide decision-makers with relevant information to improve poverty reduction strategies. Emigration has a negative impact on household poverty in Burundi. Households with at least one emigrant are less likely to be poor than those without emigrants. In addition to migratory status, region of residence, place of residence and household size, gender, marital status, activity and level of education of the head of household have an influence on the level of poverty of the household. In light of these results, we suggest that the Burundian Government encourage and support the involvement of the diaspora in development projects, and promote the development of the system and mechanisms for international monetary transfers.

keywords: migration, household, poverty, migrants, Burundi

Convergence in Family Patterns in India: The Role of Fundamental Demographic Components

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This study provides insights into the extent of familial homogenization across states over time and examines the transitional pathways of family change influenced by fundamental demographic components. First, we employ both parametric and non-parametric econometric techniques, using a macro-level panel dataset spanning 1991–2021 that integrates multiple data sources—primarily from the Census of India, NFHS, and SRS—to determine whether the process of family nucleation is converging or diverging across major Indian states. Second, we estimate the relative contributions of key demographic components that underlie the convergence process. The findings indicate that while nuclear families are increasing rapidly in most southern and eastern states, other regions are following closely. The β -convergence results show that transformations in family structures are converging over the entire period and in recent sub-periods. Conditional β -convergence estimates and Kernel density plots further support the convergence process, even after accounting for the initial steady-state conditions of states in terms of fertility, life expectancy, and urbanization. Rate decomposition analysis reveals that fertility decline contributes most to the rise in nuclear families, followed by migration, marriage, and mortality, with notable state-level heterogeneity. More demographically advanced Indian states demonstrate accelerated family nucleation. Overall, fertility and migration are strongly linked to family nucleation, reflecting convergence patterns consistent with the rise in modernization and urbanization levels.

keywords: Family nucleation, Convergence, Fertility, Mortality, Marriage, Migration, India.

Fertility Lag and the Educational Paradox: An Analysis of the Roma Population Demographic Transition in Türkiye

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The fertility pattern of a population is an important indicator to determine the demographic transition stage. However, it is not easy to apply to the minorities, such as the Roma population, which is known

as a closed community and a hard-to-reach population. They have experienced a fertility level that the general population of Türkiye had 35 years ago. All indicators for the Roma population, taken from TRPS 2023, are similar to those for Türkiye in 1998. Total fertility rates (TFRs) are 2.80 for the Roma population in 2023 and 2.76 for Türkiye in 1998. The values for C_m are 0.76 and 0.67, for C_c are 0.42 and 0.33, for C_a are 0.95 and 0.86, and for C_i are 0.89 and 0.88, corresponding to the Roma population in 2023 and Türkiye in 1998, respectively. These variables ensure that both populations exhibit TFRs slightly above replacement level, and contraception is the dominant factor in limiting fertility in both cases. Besides, educational attainment has a negative correlation with the fertility level of the Roma population. TFRs's no education/primary school incomplete are 3.3 and 3.9, while secondary school and higher 2.4 and 1.6 in the Roma population and Türkiye respectively. Higher education is associated with more substantial decline in fertility among women across Türkiye, whereas this effect remains weak among Roman women. This study examines the socio-cultural and structural factors that moderate the education–fertility relationship within the Roma population, resulting in slower demographic transition.

keywords: Roma population, fertility transition, education, minorities, Türkiye, demographic modernization

Defining the Demographic Crisis

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Demography of crises is a field focused on the impact of crises on populations. In this context, a crisis refers to various types of events that lead to a deterioration of living conditions within a population. These may include, for example, wars, genocides, famines, natural disasters, economic crises, or pandemics. The aim of this research is to deepen the understanding of these effects on populations through the analysis of crisis consequences. This, in turn, may lead to enhanced preparedness and more effective targeting of counter-crisis measures. Furthermore, the findings can be applied in legal proceedings or used to forecast the development of crisis-affected populations. While demographers have studied crises for decades, it must be noted that, with few exceptions, this research has consisted of isolated case studies, often treated as unique phenomena. Consequently, this field of research faces several challenges. These primarily include the absence of a unified methodological framework and, consequently, a lack of more generalized findings. These problems also stem, to a certain extent, from the lack of a clearly delineated definition of the term "demographic crisis." The aim of this paper is therefore to present a newly proposed definition of a "demographic crisis." This definition is based on selected indicators of mortality, fertility, and migration, and their integration with statistical methods. The paper will also include an outline of the analysis of specific crisis case studies.

keywords: crisis, excess mortality, definition

Raising the Retirement Age for Women: Spillover Effects on Young Adults' Labor Supply in Brazil

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Latin America is facing rapid population aging. To address the sustainability of contributory pension systems, many countries are considering increasing the retirement age. One such case is Brazil, where a pension reform in 2019 raised the retirement age from 60 to 62 for women. While the effects of such reforms on the labor force participation of older adults and their spouses have been widely analyzed, intergenerational spillover effects remain understudied, particularly in Latin America. Evidence from other contexts suggests that a mother's retirement can increase her young daughters' labor supply, particularly among households with young children. However, most of this evidence comes from European countries with broader access to formal sources of childcare. In this paper, I estimate the effect of grandmother's retirement on the labor force participation of young adults in Brazil. Using data from Brazil's Continuous National Household Sample Survey (PNADC) from 2023 and a fuzzy regression discontinuity design, I find that older women substantially reduce their working hours upon retirement. Moreover, adult women living with young children and an older woman who retires upon reaching the minimum retirement age increase their working hours by 0.5 for every hour the older woman stops working. No significant effects are observed for men, even when young children are present in the household. These findings suggest that, in contexts with limited access to

formal childcare, grandmothers play a crucial role in supporting their daughters' labor supply, particularly when young children are involved.

keywords: retirement, retirement age, spillover effects, informal childcare, labor force participation

Time-series clustering application in fertility

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Time series clustering analysis is commonly used as a tool for finding hidden structure in the data. Currently, this method is most often applied in areas such as medicine or finance. The aim of this study is to verify the possibilities of using time series clustering analysis in a demographic context, specifically when examining structural similarities in the development of total fertility across regions of the Czech Republic. Attention is paid in particular to identifying common development patterns in regions grouped into the same cluster and, conversely, emphasizing the differences between clusters. The analysis shows that regions can be divided into three basic groups, which differ most in fertility development in the years 2007-2008 and 2022-2023. These key periods became the starting point for a more detailed examination of differences between clusters based on selected socioeconomic characteristics.

keywords: Demography, Clustering, Time-series

Till Chores Tear Us Apart: Perceived unfairness in household labor division and the risk of union dissolution among couples in Germany

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Despite substantial advances toward gender equality, unpaid domestic labor and caregiving remain disproportionately carried out by women, and these disparities often intensify as partnerships become more institutionalized. While prior research has documented the unequal distribution of household labor, less attention has been given to how partners perceive these arrangements, and how perceived unfairness influences relationship outcomes. This study investigates how subjective evaluations of the division of labor predict union dissolution among German couples. Drawing on data from the German Family Panel (pairfam) and the German Family Demography Panel Study (FReDA), and applying Cox proportional hazards models to survival-structured data, the analysis assesses how perceptions of inequity in both overall labor and unpaid domestic work shape separation risks. Results indicate that respondents who view the overall division of labor in their household as unfair experience a 68% higher risk of union dissolution compared to those perceiving it as fair. The association is especially pronounced among full-time employed women, suggesting that economic autonomy strengthens women's ability to leave relationships characterized by persistent dissatisfaction and unequal household labor. These findings demonstrate the importance of incorporating subjective fairness assessments into research on relationship dynamics and underscore economic independence as a key condition enabling women to act on perceived injustices within intimate partnerships.

keywords: Gender inequality, Division of labor, Union dissolution, Couple Dynamics

Demographic and Socio-Economic Profiles of Same-Sex Couples in Austria

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Family and fertility research has long centered on heterosexual couples but is increasingly addressing LGBTIQ+ individuals and same-sex couples. Still, there is insufficient representative evidence on most countries' sexual minority populations. In Austria, register data became recently available, opening up new possibilities for research. I will present initial results from the project "Same-Sex Families in Austria" (SAMFA), the first to use these new data to investigate same-sex families in Austria. The family life of same-sex parent families and couples in Austria has been subject to major policy changes in official unions, fertility and adoption in the last 15 years. For instance, marriage of same-sex couples was introduced in 2019. Using administrative register data from 2010 onwards

provided by the Austrian Micro Data Center (AMDC), the characteristics of female and male same-sex couples with and without children can be examined at relevant time points such as marriage, registering partnership or the birth of a child. Even though this data does not contain information on individual sexuality or gender identity, it covers the whole population, thus providing sufficient numbers for minority groups. The analysis answers questions such as: How did the number of same-sex couples in registered partnerships and marriage change over the last 15 years? What is the age of same-sex couples at marriage compared to different-sex couples? How many couples live with children and how many children grow up with a same-sex couple? Is equality in income differences and employment patterns higher in same-sex couples?

keywords: same-sex couples, sexual minorities, register data research

Pandemic crisis: from the epicentre to the periphery. Propagation and demographic impact of covid-19 in northern Portugal.

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The covid-19 pandemic revealed deep territorial and demographic inequalities, exposing the vulnerability of peripheral communities in relation to urban epicenters. This study analyzes the initial spread of the pandemic in Portugal, focusing on the northern region—particularly the Tâmega and Sousa and Ave valleys—and on the municipality of Vizela during the first quarter of 2020. The research combines indicators of mortality, hospital accessibility, medical density, and population mobility to understand the differentiated impact of the health crisis across distinct socio-spatial contexts. Although northern Portugal recorded the first covid-19 outbreak (municipality of Felgueiras) and the highest initial incidence, Vizela stands out as a paradoxical case: a densely populated municipality (970 inhabitants/km²) with intense intermunicipal mobility but relatively low mortality in the early months. This resilience is linked to a younger population, close hospital proximity (less than nine minutes' travel), and rapid implementation of local mitigation measures, such as testing in care homes and distributing masks to residents. Mobility data reveal a clear correlation between noncompliance with confinement—especially during Holy Week—and subsequent contagion increases, reflected in the mortality peak between 6 and 12 April 2020. The highest estimated spread occurred in densely populated and functionally interconnected municipalities such as Guimarães and Vizela. Overall, human mobility was the main vector of the virus's territorial expansion, confirming that "it is not the virus, but humankind that makes the epidemic." The Vizela case illustrates how local responses, demographic structure, and health geography shaped the demographic impact of covid-19, emphasizing the need to integrate territorial perspectives in the analysis of contemporary health crises.

keywords: covid-19, mortality, demography, Vizela, northern Portugal

Suicidal Ideation Among Older Adults in Europe: The Role of Migration, Loneliness, and Regional Contexts

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Our research explores suicidal ideation among people aged 50+ in Visegrad, Nordic, and Baltic countries, using SHARE Wave 9 data (N = 20,996, including 1,356 migrants). Migrants reported higher rates of suicidal thoughts (6.9%) than non-migrants (4.8%). Using logistic regression, factors such as age, education, loneliness, and depression explained most of the variance in suicidal ideation. The overall difference between migrants and non-migrants was small once these factors were controlled. Within the migrant subsample, those residing in Baltic countries had lower odds of suicidal ideation compared to those residing in Nordic countries. These findings underscore the importance of socio-geographical context and psychosocial factors, highlighting the need for targeted support strategies. As aging and migration reshape Europe, emotional well-being must remain central to suicide prevention efforts.

keywords: late-life suicide, aging, share, gender gap

Trends and Heterogeneity in the Use of eContacts in Denmark: A Register-based Study from 2005-2019

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eContacts is an asynchronous communication between patients and general practitioners (GPs), for example via secure emails or mobile applications. Previous studies suggest that eContacts improve efficiency and enhance patient satisfaction. Although quantitative analyses of individual determinants of eContact use are limited, existing research suggests that younger, wealthier, and more educated people are more likely to use eContacts. However, most prior studies are cross-sectional investigations of small and selective samples that do not control for unmeasured confounders and may produce biased estimates. Using nationwide register data in Denmark, this study investigates long-term trends and individual characteristics of eContact use. Data on eContacts were obtained from the National Health Service Register from 2005 to 2019. The register includes email communication between patients and doctors in municipal clinics, prescription renewals, and short message exchanges via email, encrypted websites, or mobile applications. Mixed-effects regression models were applied to assess associations between eContacts and individual characteristics. Between 2005 and 2019, the average number of eContacts increased across all age groups. Women, highly educated, and high-income individuals showed higher incidence rates while immigrants had substantially lower use across generations. Over time, education-related differences in eContact use narrowed, whereas gender and migration gaps widened. Since 2005, eContact use has increased substantially across all population groups in Denmark, reflecting growing digital engagement in primary care. However, persistent gender and migration-related gaps highlight unequal access and adoption of eContact use. Targeted initiatives promoting digital inclusion are needed to ensure equitable use of eContacts.

keywords: eContacts, register, Denmark

The Accumulation of Adverse Life Events over the Life Course and Their Association with Mental Health and Well-Being: Exploring Gender Heterogeneity

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Background: Throughout their lives, individuals experience many adverse life events that are associated with poorer mental health and well-being. While previous research often examined individual events, less attention has been paid to the cumulative burden of multiple adverse events across the lifespan. Women show a higher vulnerability to negative consequences of adverse life events due to gender differences in the type of events experienced and how such events are processed. This study examines how the accumulation of adverse life events is related to depressive symptomatology, life satisfaction, and quality of life and whether gender moderates these relationships. Methods: An analysis was conducted using wave three of the English Longitudinal Study of Ageing (ELSA). The accumulation of adverse life events was conceptualized as the number of different events experienced, and associations with the outcomes were examined using logistic and linear regression models. Three accumulation scores were calculated: a total score (TCALE) and separate scores for self-oriented (SOCALE) and other-oriented events (OOCAL). Gender interactions were tested, and gender-stratified analyses were performed. Results: The accumulation of adverse life events over the lifespan is associated with higher odds of suffering from depressive symptomatology, lower life satisfaction, and lower quality of life. A significant moderating effect of gender was observed for TCALE for all three outcomes, indicating that the accumulation of adverse life events places a greater burden on women. No consistently significant gender interactions were found for SOCALE and OOCAL, but non-significant trends, especially for OOCAL, were consistent with the patterns found for TCALE.

keywords: adverse life events, lifecourse, gender, mental health, well-being

Large Language Models (LLMs) in Forecasting Time Series of Demographic Indicators: An Exploration of Capabilities and Methodological Challenges (A Case Study of the Czech Republic)

Anton Ivlev, Charles University

While the development of Large Language Models (LLMs) offers significant opportunities for time series analysis and forecasting, their potential in demography remains underexplored. This study aims to investigate the application of LLMs to forecast the time series of input parameters for the cohort-component method using data from the Czech Republic. The methodology will involve backtesting to generate forecasts for a past period, followed by an evaluation of their performance. The issue of data leakage—the risk that a model has already been exposed to test data during its training—will be analyzed, and attempts at its methodological control will be made. As completely eliminating this factor is challenging, a forecast for the upcoming 5-year period will be generated in addition to the retrospective analysis. The study will present preliminary results of the performance evaluation of the retrospective forecasts, examine key methodological challenges, and propose a final short-term forecast for the Czech Republic.

keywords: demographic forecasting, large language models (LLMs), time series, cohort-component method, Czech Republic

Seasonal Components of Life Expectancy Change in Belgium, 2000–2019

Ilya Klimkin, University of Louvain

Seasonality in mortality is characterized by higher mortality during winter and lower mortality during summer, yet its pattern varies by age, sex, cause of death, and even between adjacent years within the same population. Previous research has shown that fluctuations in winter mortality can substantially influence annual mortality levels, but little is known about how changes in age-cause-season-specific mortality translate into changes in annual life expectancy. Our study introduces a new approach to quantifying how shifts in age-cause-season-specific mortality contribute to changes in annual life expectancy at birth (e_0). Results show that year-to-year fluctuations in cold-season mortality among individuals aged 60+ – particularly from cardiovascular and respiratory diseases – have the strongest impact on year-to-year changes in e_0 , with this effect being more pronounced in the female population. However, over the period 2000–2019, reductions in winter mortality contributed substantially more than reductions in summer mortality to overall gains in e_0 among males, while for females, improvements in e_0 were driven equally by mortality reductions in each season. These findings highlight the importance of mortality seasonality in shaping changes in life expectancy and underscore the need to integrate seasonal components into the analysis of mortality trends.

keywords: mortality seasonality, excess mortality, influenza, climate change, life expectancy

Outcomes of the First Reproductive Experience and Their Impact on Partnership Dynamics

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The first reproductive experience, defined as an individual's first attempt to conceive or an unintentional conception, is generally considered a significant milestone in life. However, analyzing this reproductive period has been a challenging task, as most surveys capture only realized fertility and do not allow us to examine the potentially longer interval between first attempts to conceive and conception, or a possible abandonment of initial attempts due to various reasons, such as infertility, economic issues, or relationship disagreements. This paper aims to examine the effect of the outcome of the first attempt to conceive on relationship stability, including the risk of breakup. Using data from the second wave of the second round of the Czech Generations and Gender Survey (2025), which includes a new module on the first reproductive experience, I conducted a survival analysis. My results indicate that respondents whose first attempts to conceive within a heterosexual relationship were unsuccessful faced a higher risk of relationship breakup compared to those whose attempts were successful. These findings suggest that analyzing the first reproductive experience, which can have

various outcomes, can provide a broader understanding of fertility dynamics than analyzing exclusively realized fertility and births.

keywords: first reproductive experience, fertility, infertility, partnership dynamics

Degrees of inequality: How educational attainment shapes mortality associated to non-optimal temperatures in different provinces of Belgium

Emmanuelle Kuijt, UCLouvain / VUB

This study investigates how age and educational attainment influence temperature-related mortality among the elderly across Belgian provinces, addressing a critical gap in understanding climate-related health inequalities. While climate change poses a major global health threat, evidence on socioeconomic and demographic disparities in temperature-mortality associations remains limited. Educational attainment shapes vulnerability through multiple pathways: enhanced cognitive skills improve risk assessment and adaptation, and higher socioeconomic status enables protective investments. Prior research suggests that lower-educated populations may face greater risks, though findings vary across contexts. Using Belgian mortality data from 2000–2019 and a two-stage meta-regression framework, we examined temperature-mortality relationships across two separate analyses focusing on individuals aged 65+ across all 11 provinces. The first analysis stratified populations by age groups, while the second distinguished between low, secondary, and superior education levels as a proxy for socioeconomic status. Results revealed strong age gradients, with adults aged 85+ experiencing substantially higher temperature-related mortality than younger elderly groups. The education analysis showed that lower-educated populations faced elevated risks, though effect sizes varied across provinces. Cold-related mortality predominated across all demographic and socioeconomic groups. Consistent regional differences emerged across both analyses, suggesting persistent geographic vulnerabilities independent of age or socioeconomic composition. We are currently continuing this research to obtain more granular district-level results, which will allow us to identify specific meta-predictors—including demographic, socioeconomic, and environmental factors—that lead to higher relative risks of temperature-related mortality at the local level.

keywords: Climate change, Inequalities, Mortality, Educational attainment

Victimization of Travestis and Transgender People in Brazil: An Analysis of National Human Rights Hotline Data (2011–2019)

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Cristiane da Silva Cabral, University of São Paulo

Brazil's lack of official LGBTQIAP+ surveys hinders knowledge production and effective public policy, making alternative data sources crucial. This need is critically underscored by non-governmental organizations, such as the National Association of Travestis and Transsexuals (ANTRA), which has shown, since 2017, for 8 consecutive years that Brazil leads the world in trans murders. In response to this gap, the "Disque Direitos Humanos - Disque 100" (Dial Human Rights - Disque 100), an anonymous national human rights hotline, created a specific LGBTQIAP+ module in 2010 to register violations. This study analyzes 14,035 complaints filed with the Disque 100 regarding LGBTQIAP+ victims module between 2011 and 2019. While data completion for sexual orientation and gender identity improved - "not informed" cases dropped from 89.85% in 2011 to 21.27% in 2019 - this information was still missing in over half of total reports. However, the greater detail revealed alarming disproportionalities: travesti and transgender people represented 19.59% of victims, followed by gay men (19.02%), lesbians (6.83%), and bisexuals (1.88%). Despite comprising roughly 2% of the Brazilian population, trans individuals suffer nearly 20% of reported violence, with young black transwomen and travestis being the most affected. These data reveal a crisis: extreme violence towards trans people and travesti. However, this data is limited by its nature: the system allows repeated complaints by different observers, potentially duplicating records. The alarming disproportionalities unveiled by this improved, yet still imperfect, reporting prove that transparent data is the primary tool necessary to make structural violence visible.

keywords: Data gaps and underreporting, Human rights violation, Minoritized populations, Violence, Brazil public policy.

Global Trends in the Demographics of Widowhood, 1970-2020

Elder Lara-Castañeda, Sciences Po Paris

Zachary Van Winkle, Sciences Po Paris

Despite widowhood being a critical life event, systematic evidence on global trends and over time in widowhood is still lacking. Three research questions are addressed: How does the prevalence of widowhood vary across countries? How does it vary once adjusted for the age compositions? To what extent does age account for change in the prevalence of widowhood over time across countries? We draw on harmonized IPUMS data to estimate crude and age-standardized widowhood rates, which reflect the proportion of the widowed population among individuals aged 18 and older. Widowhood is a status predominantly experienced by women and is closely linked to aging populations and higher life expectancy. After controlling for age, standardized rates show less divergence between countries and highlight the occurrence of widowhood at younger ages, especially in low- and middle-income countries. Our results call attention to the sensitivity of widowhood rates to period shocks, like wars and epidemics.

keywords: Widowhood, Ageing, Sex differences in mortality

Health Expectancy Among Roma Populations in Europe: A Cross-National Analysis

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Marc Luy, Vienna Institute of Demography

Existing research suggests that Roma populations in Europe experience significantly poorer health outcomes than non-Roma populations. However, cross-national quantitative evidence remains limited. This study provides the first comparative assessment of health expectancy (HE) at age 50 and predicted health probabilities between Roma and national populations across European countries. Using data from the 2016, 2019, and 2021 Roma Surveys (EU Agency for Fundamental Rights) and EU-SILC, we analyse self-rated health, chronic illness, and activity limitations. Predicted probabilities reveal consistently poorer health among Roma, especially Roma women, compared to both Roma men and national populations. Health expectancy, estimated using the Sullivan method, shows that Roma at age 50 live significantly fewer years without limitations: 4.1 to 12.0 years for women and 4.5 to 13.6 years for men. Gaps compared to national populations reach up to -22.4 years. These findings highlight persistent and substantial health inequalities, reflecting structural disadvantages across Europe.

keywords: Health, Roma, Inequality

Less Desire for Family and High Parenting Standards: a South Korean Dilemma

Jeong-A Lee, Sciences Po / Ined

Previous literature indicates that South Korea is experiencing a significant ideational change, with a trend toward liberal views emerging in the younger generation compared to the more traditional views of older cohorts, consistent with the cohort replacement theory. However, few studies have examined cross-cohort and within-cohort changes over extended periods, with within-cohort changes in family preferences remaining inconsistent in the literature. One study suggests that women tend to become more conservative as they marry and have children, while another shows a shift away from traditional gender norms over time, particularly when it comes to views on marriage. This could be due to data limitations as both studies have been limited in their ability to track long-term changes. Using data from the Korean Longitudinal Survey of Women and Families, a panel survey of 9,997 women aged 19 to 64, this study will reconcile these differing patterns of change by leveraging seven waves (2010-2022), using latent class analysis to identify attitudinal classes. Preliminary results reveal women refusing the "marriage package" has increased at the expense of traditional women for whom family is necessary. However, attitudes towards family support remain high and stable: Korean women continue to uphold a strong sense of responsibility toward childrearing despite changing views on marriage.

keywords: Family formation preferences, South Korea, family obligations, marriage attitudes

Experiencing the Demands of Parenthood: How Unpaid Care Work Shapes Parental Well-Being in Germany

Sina Christin Löwe, Humboldt University of Berlin / Hertie School

The transition to parenthood represents a critical and transformative period in the life course, characterised by profound changes in social roles, daily routines, and emotional demands. Previous research shows that the mental well-being consequences of this transition often differ between men and women, yet the mechanisms driving these gendered patterns remain insufficiently understood. This study examines how paid and unpaid work arrangements shape trajectories of parental well-being, either moderating or mediating the impact of parenthood, with analyses stratified by gender. Drawing on longitudinal data from the German Socio-Economic Panel (SOEP), the study follows individuals from three years before to three years after the birth of a first child. Using the validated SF-12 mental health scale and fixed-effects regression models with interaction and mediation terms, the study captures within-person changes in mental well-being around the transition to parenthood. The results reveal distinct gendered trajectories: whereas mothers experience an anticipation effect prior to childbirth followed by a marked decline in well-being afterwards, fathers show only a mild and often statistically insignificant decrease across the observation period. Increases in unpaid care work are associated with steeper declines in mothers' well-being, while no consistent effects emerge for fathers. These findings indicate that unpaid care work moderates, rather than mediates, the relationship between parenthood and well-being, with effects contingent on gender and timing. By linking parental well-being to paid and unpaid work arrangements, the study offers insight into how gendered labour arrangements shape the experience of family life and the reproduction of social inequality.

keywords: Parenthood, Mental Well-Being, Unpaid Care Work, Gender Inequality, Germany

Multivariate Meta-Analysis of Temperature-Related Mortality in Mexican Metropolitan Areas: Socioeconomic and Geographical Vulnerabilities

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Itza Akari Olguín Zúñiga, Vienna Institute of Demography

Background: Climate change and rising heat exposure pose significant risks to human health; however, these risks are unevenly distributed. Mexico provides such case, given its geographic diversity and uneven socioeconomic development. Objective: This study assesses how the impact of heat and cold on mortality varies across Mexican metropolitan areas, with emphasis on geographic and socioeconomic determinants. Methods: A three-stage analysis was performed. First, temperature–mortality associations were estimated for 89 metropolitan areas (1998–2022) using time-series quasi-Poisson regression with distributed lag non-linear models (DLNMs). Second, meta-regression was used to pool estimates and derive best linear unbiased predictions (BLUPs), used for the calculation of heat- and cold-attributable fractions (AFs). Third, effect modification by geographic factors, household-level adaptations, and indicators of socioeconomic context was evaluated. Results: The overall minimum mortality temperature (MMT) was 22.7°C. Relative risks (RR) were slightly higher for extreme cold (RR=1.15, 95%CI: 1.12–1.19) than for extreme heat (RR=1.12, 95%CI: 1.09–1.15). Cold-related mortality burden was greater in temperate and arid climates, highland areas, and regions with higher heating prevalence, while heat-related burden was higher in tropical areas and those with higher air conditioning adoption. No consistent associations were observed for contextual socioeconomic indicators. Conclusion: Geographic and climatic conditions primarily shape temperature-related mortality in Mexico. Household adaptations appear to reflect adjustment to prevailing exposures rather than mitigation of risks, while broader socioeconomic effects were likely masked by geographic heterogeneity Contribution: Findings underscore geography's critical role in temperature-related mortality and provide baseline for projections of future climate impacts.

keywords: Temperature-related mortality, distributed lag non-linear models, attributable fractions, Mexico

Forecasting the Future of Košice Region: Comparing Demographic Expertise and Machine Learning in Population Projections

Dominika Miškaňová, Pavol Jozef Šafárik University in Košice

Population forecasts are crucial for strategic planning. However, creating accurate projections, especially for smaller regions, presents challenges due to the variability of demographic behaviours. The Košice region, like many areas, is experiencing significant demographic shifts, necessitating a reliable forecast model. The research aims to develop a population forecast for the Košice region through 2040 using various methods and to evaluate the accuracy and uncertainty of fertility, mortality, and migration forecasts. Three different approaches were used, all based on the cohort-component method: (1) an approach relying on a demographer forecaster's expertise; (2) a machine learning approach utilizing the FORECAST.ETS forecasting function; and (3) a machine learning approach employing the Prophet tool. These methods were employed to forecast population trends in four urban districts of Košice and the surrounding area. We evaluated the reliability of predictions from available data for the next three years, 2022-2024, across all forecast components using MAPE, RMSE, and MAE. Long-term trends show population decline in Košice's urban districts but growth in the hinterland, reflecting differences in fertility and migration patterns. The expert approach and the FORECAST most accurately predicted the individual components model; the aggregated result showed the highest accuracy when using the Prophet model. This phenomenon can be explained by the error compensation between components and the Prophet model's ability to capture nonlinear trends and changes in the direction of population development. The cohort-component framework also acts as a stabilization mechanism, reducing the impact of errors in individual partial inputs on the overall population estimate.

keywords: Population forecast, Cohort-component method, Machine learning, Forecast accuracy, Košice region

How Are Pain and Walking Difficulties Reflected in Core Health Indicators?

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Pain and walking difficulties represent key dimensions of health and functional capacity; however, their relationship with general health indicators has not yet been fully clarified. The Minimum European Health Module (MEHM) provides a framework for assessing self-perceived health, long-term illness, and activity limitations, which constitute three core health indicators monitored across European countries. The aim of this poster is to analyse how pain and walking difficulties are associated with MEHM indicators. The analysis is based on microdata from the European Health Interview Survey (EHIS) for the year 2019 and focuses on the adult population aged 25 years and over. To identify differences between the examined indicators, statistical methods suitable for the analysis of categorical data will be applied. We expect that both pain and walking difficulties will be significantly associated with poorer self-perceived health, a higher probability of having a chronic condition, and a greater level of activity limitations. Furthermore, we anticipate that the inclusion of pain and walking difficulties will expand the MEHM framework by adding a functional dimension of health that better reflects an individual's ability to manage daily activities. We assume that these indicators can help identify early signs of health deterioration that may not be immediately reflected in self-perceived health or in the presence of chronic illness. The findings may contribute to identifying additional measures that capture the overall health status of the population.

keywords: pain, walking difficulties, Minimum European Health Module (MEHM), self-rated health, health indicators

Reconstructing mortality burden from temperature extremes using age specific mortality rates over 130 years in the city of Madrid, Spain

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Aurelio Tobías, Spanish National Research Council

Understanding how extreme temperatures impact mortality across population groups is critical for assessing vulnerability to climate change and designing effective public health interventions. This study builds on previous work analyzing temperature-attributable mortality fractions in Madrid from 1890 to 2019 by converting these into age-specific mortality rates. Using daily temperature and all-cause mortality data, combined with annual population estimates by age group, we estimated time series of temperature-specific mortality rates to capture long term and period changes in mortality through time. These were analyzed over time to assess changes in risk exposure and adaptation patterns. We applied generalized linear models to investigate long-term trends in heat- and cold-attributable mortality rates, accounting for demographic shifts, population aging, and historical public health interventions, including the introduction of heat prevention plans in the mid-2000s. Preliminary results show that while the overall mortality rate in Madrid declined substantially over the study period, temperature-specific mortality rates decreased even more sharply. Cold-related mortality showed the strongest declines, while heat-related mortality reductions were more modest. These trends varied by age group and time period, with older adults consistently exhibiting higher vulnerability. By linking historical mortality surveillance with temperature exposure and population data, this study offers a rare long-term perspective on how age-specific vulnerability to temperature extremes has evolved. It contributes methodologically by translating attributable fractions into dynamic mortality rates, enabling direct comparison across time and demographic strata. Our findings underscore the need for sustained climate-health adaptation policies and highlight persistent age-based inequalities.

keywords: mortality, historical data, dlnm, extreme heat

Assessing the District-Level Determinants and disparities in Severe Maternal Morbidity(SMM) in India

Bhanupriya Pareek, Indian Institute of Technology mandi

Severe Maternal Morbidity (SMM) includes difficulties during pregnancy, childbirth, or the postpartum period. The objective of this study is to develop a district-specific SMM risk score of risk variables affecting maternal vulnerability. This study investigates the prevalence and determinants of Severe Maternal Morbidity (SMM) in India, utilizing secondary data from the National Family Health Survey (NFHS-5). The analysis combines three demographic health datasets—Birth Recode (BR), Individual Recode (IR), and Household Recode (HR)—to form a complete dataset of 232,920 women of reproductive age between the ages of 15-49. In accordance with DHS guidelines, the analytic sample yielded 103,059 women. Ten clinical conditions were taken as proxies for the conditions to find severe maternal morbidity, which includes eclampsia, haemorrhage, anaemia, prolonged labor, high fever, breech presentation, emergency caesarean section, blood transfusion, multiple births, and hysterectomy. Women who reported at least one of these conditions were classified as women with SMM conditions, resulting in a final analytical cohort of 86,984 women (84.4% of eligible respondents). Eclampsia (69.0%), haemorrhage (38.9%), prolonged labor (38.4%), and anaemia (34.8%), Very high fever (14.1%) and breech presentation (9.8%) were the most common SMM indicators. Emergency caesarean sections (8.7%), blood transfusions (4.2%), multiple births (1.6%), and hysterectomies (0.09%) were less identified among all the conditions. Utilizing nationally representative data from the National Family Health Survey (NFHS-5), various domains including maternal complications, medical conditions, dietary habits, autonomy and decision-making, healthcare access and quality, lifestyle and behavioural factors, maternal awareness, socio-economic and demographic characteristics, and exposure to violence, contain various indicators are extracted district wise to develop the risk score of SMM women using exploratory factor analysis to find hidden domains and figure out district-level ratings that show how the various risk factors are contributing district-wise in assessing the risk for SMM.

keywords: Severe Maternal Morbidity (SMM), Factor Analysis, District-Level Index,NFHS-5

Education Expansion, Urbanization and Fertility Change in Sub-Saharan Africa: A Decomposition Approach

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This paper examines how education progress and urbanization have shaped fertility changes across Sub-Saharan Africa over the last four decades. Despite rapid structural transformations, the region records the highest fertility levels worldwide. Using Demographic and Health Surveys (DHS) from 18 countries between 1987 and 2023, I reconstruct fertility trends and apply decomposition techniques to identify the separate contributions of education and residence to national fertility change. Three models are implemented: a rural–urban decomposition, a combined residence-education decomposition, and a three-stage model that isolates educational change within rural and urban contexts from the effects of urbanization itself. This approach allows for a detailed examination of both the rates and compositional components of fertility decline. Results show that fertility decline is largely driven by rural women, particularly those with little or no schooling. However, compositional shifts related to educational progress and urbanization contribute substantially in countries such as Ghana, Kenya, and Nigeria. In contrast, fertility reduction remains modest in countries where educational expansion has stagnated, such as Niger and Chad. These findings underscore the central role of rural education in fertility transitions and highlight the heterogeneity of demographic change across the region, while also demonstrating the value of the Kitagawa decomposition for disentangling structural and behavioral effects in fertility dynamics.

keywords: Fertility Change, Education, Urbanization, Decomposition, Sub-saharan Africa

Impact of Adult Children's Migration on Well-being of Left-Behind Elderly Parents: Evidence from an Out-Migration-Prone Region in India

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With rapid urbanisation, millions of people in India are migrating from economically disadvantaged regions to other parts of the country in search of better employment opportunities. While adult children's migration can improve household income through remittances, it may also disrupt traditional caregiving structures and emotional support for left-behind elderly parents. This study examines the impact of adult children's migration on the material living satisfaction and psychological well-being of left-behind elderly parents in the Middle Ganga Plain (MGP), one of the most out-migration-prone regions in India. Using cross-sectional data of 1,080 elderly aged 60+ years, the study employed Ordinary Least Squares (OLS) and negative binomial regression models to analyse the associations. Regression results showed that left-behind elderly parents had a significantly higher satisfaction with material living conditions ($\beta = 0.33$, $p < 0.05$) than their non-left-behind counterparts. It suggests an economic benefit associated with migration that could be used to improve material living conditions. Moreover, left-behind parents were less likely to report emotional distress ($\beta = -0.20$, $p < 0.001$) compared to non-left-behind parents. This finding may reflect the perceived economic security, household improvements, and social recognition from migration. However, frequent visits to parents were positively associated with emotional distress ($\beta = 0.04$, $p = 0.005$) among left-behind parents, perhaps due to heightened parental anxiety during visits driven by health or family crises. Findings highlight that economic and symbolic gains from migration may offset the psychosocial costs of separation in the resource-poor rural context of eastern Uttar Pradesh and Bihar, India.

keywords: Migration, left-behind, elderly, well-being, emotional distress, India

Impacts Of The COVID-19 Pandemic On The Health And Living Conditions Of Immigrants And Native French Citizens

Tom Perret, University of Strasbourg / IRD-CEPED

While social inequalities in health persist in France (Cambois et Jusot, 2007), it is clear that immigrants, who number nearly 7 million in 2021, are more likely to live in precarious conditions that can affect their health. However, from a theoretical perspective, the healthy migrant effect should suggest a health advantage for immigrants (Khlaf and Darmon, 2003; Jusot et al., 2009). In the context of Covid-19 pandemic, we are seeing higher mortality rates among immigrants (Warszawski et al, 2022). However, few information is available on the consequences of the pandemic on immigrants' living conditions and health. Based on data from the 2021 French Health Barometer survey of a sample of more than 24,000 individuals aged 18 to 85, we examine the self-reported effects of the pandemic on four variables: health status, mood, financial situation, and employment status. In terms

of proportions, we observe that immigrants report more effects of the pandemic than natives. After adjustment by logistic regression, the probability of reporting an effect of the pandemic remains higher for immigrants. However, we find that some of the differences observed at the outset can be explained by the effect of sociodemographic characteristics. Thus, the effects of the pandemic can be explained mainly by living conditions. This reinforces the importance of social determinants in explaining health inequalities. During an epidemic, the vulnerability of immigrants can therefore be exacerbated by more precarious living conditions.

keywords: health crisis, migrants, living conditions, France

Interparental Relational Mismatch: Implications for Children's Non-Cognitive Development

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Family structures and relationships are central to children's development, with parental relational happiness playing an important role, yet little is known about the effects of unequal relationship satisfaction in seemingly typical two-parent families. This study introduces the concept of Interparental Relational Mismatch, a discrepancy in reported relationship happiness between parents, and examines its impact on children's non-cognitive skills from early childhood to adolescence. Using seven waves of the Millennium Cohort Study (ages 9 months to 17 years), children's emotional symptoms, conduct problems, hyperactivity, peer relationship problems, and prosocial behavior were assessed via the Strengths and Difficulties Questionnaire. Interparental mismatch was categorized by its presence or absence and by the parent reporting lower happiness, with additional categories for single-parent families and those with a changed partner. Associations were estimated using lagged panel regression models, with fixed-effects models assessing potential causal effects. Results indicate that mismatch, particularly with lower maternal happiness, is linked to higher behavioral difficulties and lower prosociality, with the strongest effects in early childhood and variable patterns across adolescence. Paternal mismatch shows smaller effects, suggesting a protective role of maternal well-being. Absence of mismatch but with medium-low couple happiness is associated with poorer outcomes across all skills. Families with a changed partner show notable impacts on peer relationships, whereas single-parent status has limited effects. Fixed-effects models confirm these patterns. These findings suggest that even subtle family dynamics are perceived by children and can affect their developmental trajectories, emphasizing the need to support parental relational well-being in interventions.

keywords: Interparental Relational Mismatch, Family Dynamics, Non-Cognitive Development, Strengths and Difficulties, Millennium Cohort Study

Transitions in Family Structure Across Childhood in France

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In France in 2023, one third of all minors live in family structures other than the nuclear family, such as single-parent households with primary custody, stepfamilies, or, since the 2000s, in two households through joint physical custody. Despite this increasingly diverse landscape, national statistics tend to oversimplify family forms by relying on broad aggregates. Depending on the parent's conjugal situation, for instance, shared custody is often grouped either with the single-parent or the stepfamily category. Moreover, children may live in a reconstituted family only part of the time. My aim is to highlight the diversity of family settings in which a generation of children grow up, challenging the simplified categories used in national statistics. I describe their distribution and transitions from early childhood to adolescence, using a repeated survey that allows for a more detailed identification of emerging family forms. The poster presents the family structures of French children born in 2011, followed from ages one to ten. The analysis draws on data from the French Longitudinal Study of Children (ELFE), which follows a cohort of over 18,000 children born in 2011. Five survey waves—at ages one, two, three, five, and ten—are used to assess the prevalence of seven distinct family

structures (a typology designed to be exhaustive and exclusive), before examining their transitions over time. Finally, survival analyses using Cox models distinguish two main periods of family transition (ages 1–5 and 5–10), each differently influenced by parental education, income, age, and family size.

keywords: Family structure, Childhood, Longitudinal study, Transitions

Aging, Health Inequality, and Violence: Findings from a Cross-Sectional Study in Central India

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India's ageing population faces growing health and social challenges, including elder abuse and rising non-communicable diseases (NCDs). Yet, limited evidence exists on their prevalence and determinants in smaller urban contexts. This study examined patterns of abuse and health inequalities among older adults in Jabalpur city, Madhya Pradesh. A cross-sectional survey of 1,264 individuals aged 60 years and above was conducted, and bivariate and multivariate logistic regression analyses were used to identify key predictors. Findings revealed that 16.3% of older adults had experienced some form of abuse, with marked disparities across gender, marital status, and socioeconomic background. Single older women—widowed, divorced, or separated—reported the highest prevalence (22.4%), followed by 17.6% among currently married women and 12.4% among men. Older adults aged 75 years and above (OR = 1.62; 95% CI: 1.24–2.08) and those not engaged in work (OR = 1.31; 95% CI: 1.06–1.59) were significantly more likely to face mistreatment. Conversely, those currently working (OR = 0.74; 95% CI: 0.47–1.04) and individuals from higher wealth quintiles (OR = 0.42; 95% CI: 0.28–0.59) were less vulnerable. The prevalence of NCDs was 47.4%, disproportionately higher among women and wealthier older adults. The findings point to the intersection of gender, ageing, and socioeconomic inequality as critical determinants of elder well-being. The coexistence of violence and chronic illness reflects both social vulnerability and structural neglect. Policy responses must prioritize older women's protection, expand access to health insurance and pension schemes, and strengthen community-based care and support networks to ensure dignity, safety, and healthy ageing in India's rapidly greying society.

keywords: Older women, inequalities, India

The Third Demographic Transition

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Since at least the 1950s, Europe has experienced significant immigration of people from remote geographic regions with cultural and ethnic characteristics distinct from those native to Europe. These migration flows have had a substantial impact on European demographics. The theoretical foundations of these impacts were first laid out by an Oxford-based demographer David Coleman in 2006. Coleman coined the term "third demographic transition", which he defined as a permanent and radical alteration of some national populations in Europe and argued that the degree of replacement of the native population, the geographic remoteness of the immigrants' origins, and the pace of change, are all without precedent. First, I examine the prerequisites of this phenomenon: persistent sub-replacement fertility, high levels of immigration, and the elevated fertility rates of immigrants. Next, I analyze the population structures of selected European countries and their regions using the latest available data on ethnicity or immigration background. If the current trends continue, it is highly likely that some European countries might soon end up with a population that is predominantly made up of people of recent immigrant origin. The significance of these changes is a subject of debate, and includes ambivalent cases, such as individuals of mixed native and immigrant origin. The consequences of this development are multifaceted and extend beyond the scope of demographic research. However, if these changes transpire, it might be justifiable to refer to them as a third demographic transition.

keywords: immigration, fertility, ethnicity, Western Europe

Family and Non-family Networks in Older Europeans: Typologies and Health Changes in Later Life

Federica Prete, University of Florence / Sapienza University of Rome
Eleonora Trappolini, Sapienza University of Rome

Social networks are key determinants of health and well-being in later life, yet most studies still privilege family relations. This paper adopts a multidimensional approach, integrating both family and non-family ties, to examine how different network types relate to changes in multiple health outcomes among older Europeans. Using data from Waves 6 and 9 of the Survey of Health, Ageing and Retirement in Europe (SHARE), Latent Class Analysis (LCA) identifies six network types based on indicators of structure (network size and composition), function (contact frequency as emotional support, receiving help as instrumental support), and quality (relationship satisfaction). A multinomial logistic regression links network type at Wave 6 to changes in four health outcomes - self-rated health, depressive symptoms, functional limitations, and grip strength - between Waves 6 and 9, distinguishing three categories (improved, stable, worsened). Models control for sociodemographic factors and life events between waves. Results show significant associations for health improvement but not for worsening. Older adults in Family-focused, Diverse, and Multi-tie networks are less likely to report improved self-rated health, while Multi-tie and Diverse networks are linked to better mental health (EURO-D) among both genders. Women in Family-restricted and Non-kin-Unsupported networks also show modest mental health gains, whereas men in non-kin networks display lower grip strength improvement. No associations emerge for functional limitations (GALI). These findings underscore the multidimensional and gendered nature of social connectedness in later life and its differentiated effects across health domains.

keywords: social networks, intergenerational relations, health change, ageing, SHARE

Subjective Health and Its Determinants in the Working-Age Population in Czechia

Kateřina Procházková, Charles University

Health is a desirable and natural state that most people want to achieve. However, not everyone attains equally good health throughout their lifetime. Inequalities in health arise from differences in social, economic, and genetic conditions. The determinants of health influence both lives of individuals as well as entire societies, having positive as well as negative effects on human well-being. The determinants of health are organized into four groups: demographic determinants, economic capital, social capital, and lifestyle. At present attention has been primarily directed towards the health status of the ageing population. Yet, examining health among the working-age population is equally important, as this period of life is marked by changes in behavioral patterns that have a profound impact on health outcomes. It is also a phase during which individuals develop their identity and health-related behaviors, thereby shaping their long-term health trajectory into adulthood and old age. A deeper understanding of health determinants within this age group can provide an essential foundation for targeted prevention strategies and interventions aimed at promoting healthy lifestyles and supporting healthier aging.

keywords: subjective health, working age population, health determinants, Czechia

Should I Stay or Should I Go? A Joint Analysis of Individual and Spatial Determinants of Student Mobility

Eugenia Proserpi, University of Strasbourg

Since the implementation of selective admission to master's programs in France in 2016, continuing one's studies has become increasingly complex amid the massification of higher education. In response to this selectivity, a growing number of students pursue master's degrees at different institutions, thereby leaving the institutions where they completed their bachelor's degree. This phenomenon raises important questions about the factors that shape student mobility between higher education institutions (HEIs). Literature has identified a set of socio-demographic, academic and spatial variables as its main drivers. However, few studies have analysed the impact of these three

types of determinants jointly. The aim of this article is therefore to understand the determinants of student mobility between HEIs. More specifically, it seeks to determine which type of determinant has the strongest effect on student mobility during the transition from bachelor's to master's degrees in French higher education. This work is based on the hypothesis that spatial characteristics, and more specifically institution-related variables such as size and diversity of educational programs, play a greater role than individual characteristics in the decision to pursue a master's degree at a different institution. To that end, this work will use the French database SISE, a comprehensive administrative database registering enrolments in HEIs, measuring mobility between different HEIs and giving detailed socio-demographic information about each student. To assess the HEIs' attractiveness, we built a classification of institutions based on their size, the number and variety of teaching programs, as well as their international reputation.

keywords: Student mobility, Higher education institutions, Academic transition, Spatial Determinants, Individual Determinants

Reconstruction of fertility data during demographic transition in the Czech lands, 1895–1925

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In Czechia robust and detailed fertility data have only been available since 1925. However, to understand the pattern of fertility decline during the demographic transition, data for the preceding years are needed. In this poster, we present newly reconstructed data for the period 1895–1925. For this time span, data exist only for broad age groups, which significantly limits scope of fertility analysis. These data are found in the publications of the Czech Statistical Office – *Obyvatelstvo českých zemí v letech 1754–1918*, Díl II. (Prague, 1978), *Přirozená změna obyvatelstva v zemích Koruny české v letech 1. světové války 1914–1918*, and the demographic yearbooks from 1919 to 1925. We applied a composite link model to estimate detailed fertility schedules of Czech women 1895–1925, which allowed us to analyse tempo and quantum of fertility during a crucial part of demographic transition. The results reveal a decline in TFR from about five children per woman to below two during the First World War, followed by a clear compensatory increase to around three in the immediate post-war years. We also analysed the timing and age schedule of fertility, focusing on the mean age at childbirth. The Czech lands thus represent one of the earliest Central European regions – specifically within the Habsburg Monarchy – to have completed the fertility transition, driven by the influence of Western Europe.

keywords: Fertility, Demographic transition, Composite link model

The Intersectionality of Well-Being: A Fuzzy Approach

Tapasya Raj, University of Strasbourg

Despite rapid economic growth, India continues to exhibit deep social inequalities in life outcomes. This study investigates multidimensional well-being in India through an intersectional demographic lens, emphasizing how caste and gender jointly shape disparities in life outcomes. Grounded in Amartya Sen's capability framework and intersectionality theory, the research conceptualizes well-being as a multidimensional construct encompassing material, social, and agency-related achievements rather than a single economic measure. Using individual-level data from the National Family Health Survey (NFHS-4, 2015–16), the study employs a fuzzy-set approach to quantify achievements across seven dimensions—housing, health, education, employment, economic resources, empowerment, and gender attitudes. The fuzzy framework captures continuous gradations of achievement and incorporates rarity and redundancy weights to enhance informational precision. Initial findings reveal persistent inequalities: women, particularly from scheduled castes and tribes, have lower well-being scores, while men from dominant socio-economic groups fare better. By integrating intersectionality with a rigorous empirical framework, this study refines multidimensional measures of well-being and highlights targets for inclusive, equity-oriented policies.

keywords: Intersectionality, Multidimensional well-being, Fuzzy-set approach

Emigration and Economic Growth in Moldova: Evidence from an Endogenous Growth Model (2015–2024)

Artiom Samohvalov, *Academy of Economic Studies of Moldova*

Emigration and remittances had a critical impact on Moldova's socioeconomic context, as financial transfers from migrant workers contributed decisively to household well-being and economic stability. Recent technological and political shifts together with migration-driven demographic transformations highlight the need to reassess the impact of migration on Moldova's development over the past decade. This study examines whether emigration promoted or reduced economic growth in Moldova for 2015–2024, utilizing an endogenous growth model, based on Cobb-Douglas model. The analysis incorporates capital stock, total number of employed at least an hour during the year, and the average government investment in education (share of GDP), along with international migration stock data. Results demonstrate that the increasing number of Moldovan migrants living abroad from 2015 to 2024 contributed to an average annual GDP at PPP growth of 2.7% in Moldova, despite challenges such as labor market shortages and brain drain. Migration and remittances supported investment and stimulated consumption, serving as a net positive force for economic growth. The study's findings, supported by related literature on migration-driven development, indicate that migration was instrumental for Moldova's economic resilience during 2015–2024. However, the research also notes limitations resulting from skill outflows and the relative ineffectiveness of government education investment in stimulating growth. These results are relevant for policymakers aiming to optimize migration and education strategies to support sustainable development in Moldova and similar contexts. The topic remains especially important under current economic uncertainties and demographic transition.

keywords: brain drain, emigration, Moldova, remittances.

The Impact of Subnational Heterogeneity on Population Ageing: A Case Study of Australia

Tabitha Scott, *University of Vienna / Australian National University*
Vladimir Canudas-Romo, *Australian National University*

Population ageing is occurring rapidly in many countries worldwide, however, the influence of subnational-level factors on ageing at the national level is often overlooked. We decompose the change over time in national mean age into subpopulation-specific and age-specific contributions. This decomposition shows how ageing and compositional factors at the subnational level interact to determine ageing at the national level. We applied this decomposition using Australian census data from 2011 and 2021 across numerous subnational indicators, including education, income, country of birth and religion. Population ageing occurred at the national level and in all subpopulations considered. Despite this, many older, rapidly ageing subpopulations had a rejuvenating effect on ageing at the national level, while younger, slowly ageing subpopulations had the greatest impact on ageing at the national level. The impact of a subnational population was largely determined by its growth rate relative to the national population, with the fastest growing subpopulations having the greatest impact. This demonstrates the importance of considering compositional factors, namely population growth, when assessing the effect of subnational ageing on national ageing. More generally, it calls for nuance when considering the interplay between demographic processes at the national and subnational level.

keywords: Decomposition methods, formal, ageing, subnational, Australia

Bargaining over Babies: Evidence from India

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Fertility behaviour is shaped not only by biological or economic factors but also by gendered power relations within couples. In patriarchal settings such as India, where son preference remains deeply rooted, reproductive choices emerge from negotiation between spouses whose preferences often differ. This paper applies a dyadic approach to examine how couples' desired and actual sex

composition of children influence spousal (dis)agreement regarding future fertility intentions. Using nationally representative couple-level data from the National Family Health Survey (NFHS-5, 2019–21), the study models four categories of fertility intention: neither wants another child, only the husband wants, only the wife wants, and both want another child. The key explanatory variable captures whether the current sex composition matches the husband's ideal, the wife's ideal, both, or neither, while controlling for demographic and socio-economic characteristics. Results show that men express stronger fertility and son preferences than women, and that around 40 percent of couples disagree on their fertility ideals. Spousal disagreement declines with women's education, employment, and autonomy, suggesting empowerment shifts bargaining outcomes. Couples whose preferred sex composition is already achieved are least likely to desire another child, while disagreement itself reduces the likelihood of further childbearing. The sex of the first-born remains decisive—couples with a first-born daughter are more likely to intend additional children. These findings highlight the demographic implications of intra-household bargaining, showing how gender norms and power dynamics shape fertility preferences and reproductive outcomes in India.

keywords: Fertility intentions, Son preference, Spousal disagreement, Bargaining, India

In Search of a Suitable Boy - Tracing Gendered Linkages Between Employment, Education and Age at Marriage in India

Shreya Singh, University of Bamberg

Srinivas Goli, International Institute for Population Sciences

Recent demographic shifts in India show a marked rise in mean age at first marriage, attributed to improvements in female education and changing aspirations in current literature. However, this improvement has not been at par with the dramatic rise in enrolment rates of females, especially in secondary and higher educational categories. Concurrent trends in male unemployment raise the possibility of alternative explanations for understanding the rise in age at first marriage of women in India. This paper examines whether increasing male unemployment contributes to delays in marriage timing, relative to the role of female education. Using the CMIE-CPHS panel dataset for the years 2020-2023, this analysis focuses on marriage transitions among young adults and employs a Cox proportional hazards model to estimate the impact of transition to employment and completed education on the hazard of first marriage. State level fixed-effects regression model has also been fitted to understand the contribution of women's education and male unemployment-rates to the age at first marriage of women as a robustness check. Preliminary analysis reveals that employed males have a greater hazard ratio of entering a marital union as compared to unemployed males, driving the waiting time for marriage upwards. These findings suggest that changing dynamics of the marriage market have vastly different outcomes for men and women when it comes to marriage market and may not signal an actual improvement in autonomy and agency for women.

keywords: Age at Marriage in India, Gendered Marriage Transitions, Transition to employment and waiting time for marriage

Uncovering the Cohort Contributions to the Population Growth in Czechia

Jan Stejskal, Charles University

Elizaveta Ukolova, Charles University

In the standard balance equation, contributions of individual cohorts to population change remain hidden. However, these cohort contributions are crucial for understanding population dynamics. This poster focuses on the cohort decomposition of change in the population growth rate in Czechia between 2004 and 2008. This period was characterised by a significant population growth driven by rising fertility and immigration as well as declining mortality. The aim of the analysis is to identify how different cohorts contributed to the change in population growth rate through its three main components – fertility, mortality, and migration. The cohort perspective allows us to capture the effects of historical demographic trends that have shaped the current population structure, providing a better understanding of the mechanisms behind present population growth. The analysis is based on data from the Czech Statistical Office, complemented by reconstructed historical data covering the period from 1895 to 1920. We apply the method developed by Canudas Romo and colleagues for decomposing the historical drivers of current population growth. Preliminary results indicate that the

cohort contributions to population growth change in Czechia differ from those observed in Western European countries such as Denmark, the United Kingdom and France.

keywords: Czechia, cohort decomposition, population growth, population growth rate

Leading Preventable and Treatable Cancer Sites in Central European Countries: From Period Mortality Data to a Cohort Perspective

Vitalie Stirba, Charles University

Every generation develops distinct behavioural and lifestyle patterns shaped by the socioeconomic and political context of its time. Differences in alcohol and tobacco consumption, nutrition, physical activity, and reproductive behaviour across generations influence the risk of developing specific cancer sites. At the same time, advances in healthcare and policy interventions—such as early diagnosis, effective treatment, and reduced exposure to risk factors—have contributed to declining cancer mortality and improving survival rates. This study examines bladder, breast, colorectal, oesophageal, lung, stomach, lip, and oral cavity cancers in Central European countries from a cohort perspective, using period mortality data from the World Health Organisation (WHO) and the Human Mortality Database (HMD). Based on information on cause of death, age, sex, and year of death, birth cohorts were reconstructed to explore generational differences in cause-specific mortality trends. Because deaths were coded under several ICD revisions over time, data were harmonised across the 7th, 8th, 9th, and 10th ICD classifications to ensure comparability. The findings contribute to a better understanding of how generational patterns shape long-term cancer dynamics in Central Europe.

keywords: avoidable mortality, cancer, mortality trends

A Regionally-Based Probabilistic Forecast of Human Extinction

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Jeff Tayman, Tayman Demographics

Studies that predict species extinction have focused on a range of flora and fauna but in regard to *Homo sapiens* there are, with one notable exception, no predictive studies, only considerations of possible ways this may occur. The exception believes extinction of *Homo sapiens* will happen in 10,000 years. We agree that extinction will happen, but we disagree on the timing. Given continuation of the trend in the decline in fertility between 2020 and 2025 observed for all five of the world regions recognized by the United Nations (Africa, Americas, Asia, Europe, and Oceania) and employing a "bottom-up" probabilistic projection method in conjunction with 66% confidence intervals, we find the world population will be between 2.59 and 2.82 billion by 2130; between 51.53 and 72.11 million by 2230; between 3.0 and 4.1 million by 2280; between 767.4 and 997.4 thousand by 2300; between 33,040 and 40,189 by 2360; and between 1,058 and 1,281 by 2415, whereupon the human species becomes extinct. Asia will be the first region to experience extinction (2280), Europe, the second (2295), followed closely by the Americas (2300), then Africa (2360) and finally Oceania (2415). Although there is regional variation in the reasons (the desire for fewer children, advancements in contraceptive technology, the worldwide rise in male and female infertility, the cost of having and raising children in modern and modernizing economies and the fact that populations worldwide are aging beyond the age group in which reproduction is both possible and feasible), these factors have come together such that they have resulted in the force driving extinction – declining fertility, which if not already at or near to a level too low to sustain a given regional human population, is heading there. Notably, while we likely bear more than a small level of responsibility for the possibility of a "sixth mass extinction event," we also appear to be the only species facing extinction due to internal circumstances.

keywords: ARIMA, Bayes, Cohort Change Ratios, Cost of Children, Infertility

Likes, Loves, and Little Ones: Social Media Use, Union Histories, and Fertility Intentions Among Young Adults in Europe

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Paweł Strzelecki, Warsaw School of Economics

This study examines the association between social media usage and fertility intentions among adults aged 28–32 in Croatia, Estonia, and Norway, using data from the second round of the Generations and Gender Survey. Particular attention was given to union histories before age 28, using panel data from the Harmonised Histories database. Descriptive results show that individuals spending 2–4 hours daily on social media had a particularly high average number of unions formed by age 28 (0.87), the lowest mean age at first union (22.20), the longest average union duration before 28 (4.81 years), and the highest average ideal family size (general: 1.70; personal: 1.82). In contrast, those spending more than 4 hours daily formed fewer unions (0.82 on average), had particularly short unions (4.39), fewer intended children (1.40) and the lowest proportion of long-term unions leading to marriage (34.2%). Generalised ordered logistic regressions (N = 1,444) indicate that respondents were more likely to intend (more) children if they were younger, more religious, had fewer children already, held tertiary education, reported better health and subjective financial well-being, and resided in Estonia rather than Croatia or Norway. Gender differences emerged in relation to social media use. Among those spending less than one hour, women were less likely to intend (additional) children. In the groups spending more time on social media, this relationship shifted, with women becoming gradually somewhat more likely to intend any (additional) children. Overall, higher social media use appeared to be negatively associated primarily with men's fertility intentions.

keywords: social media, fertility intentions, GGS, generalized ordered logistic regression, sequence analysis

Demographic Patterns and Social Gradients of Online Dating in Italy

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Raffaele Guetto, University of Florence

The digital revolution has transformed meeting dynamics and partnership formation. This study examines the socio-demographic characteristics of online daters and partners who first met through Online Dating Services (ODSs) in Italy, a context in which research on online dating remains scarce. It draws on data from a novel, nationally representative survey of 9,004 heterosexual individuals aged 18–45. Initially, the analysis investigates patterns of selection into partnership and online dating based on socio-demographic factors – particularly gender, age, and education. Subsequently, it explores assortative mating patterns among couples who met online. Findings reveal two distinct but interrelated selection processes. Individuals aged 30–45 and those with tertiary education are most likely to be partnered. Conversely, younger and less-educated individuals exhibit lower partnership chances but higher probabilities of using ODSs for partner search. Consequently, the online dating environment is characterised by an overrepresentation of men, younger individuals, and those with low education. The negative educational gradient does not vary by gender, since low-educated women are also more likely to engage in online dating. Couples who met online predominantly comprise individuals aged 25–34 and those with upper-secondary education. Online partnerships display greater age heterogamy than offline ones, but also higher levels of educational homogamy, which has become prevalent in recent years. Overall, online dating appears to reproduce rather than challenge existing social inequalities. Despite widening opportunities for partner search, online dating remains socio-demographically stratified, with education emerging as a key determinant of both access to and outcomes of romantic encounters.

keywords: Online Dating, Partnership, Education, Inequality

Immigration, Discrimination, and "Lepenisation" in Spain: A Demo-Spatial Analysis at the Municipal and Intra-Municipal Scale

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Jordi Bayona, Centre d'Estudis Demogràfics

Andreu Domingo, Centre d'Estudis Demogràfics

This research analyzes the relationship between immigration, discrimination, and the rise of the far-right in Spain. Using a demo-spatial and multi-scalar approach, it examines how the size,

characteristics and territorial distribution of the immigrant population influence the evolution of the far-right vote, a result of the process of "Lepenisation," which is defined as the proliferation of radical positions within far-right parties concerning nationality, identity, and race (Tévanian and Tissot, 1998). Spain is a major receiving society, currently registering a 16% foreign-born population. Nevertheless, the consolidation of Vox and the emergence of regional radical right parties in recent years promote negative perceptions about the immigrant population and fuel discrimination. They achieve voter capture through discourses centered on national identity framed in an exclusive and racialized manner (Wallerstein and Balibar, 1991). The study combines quantitative and multivariate methods applied to census and electoral data. The results allow for the classification of municipalities into four types: 1. Production Pressure Paradox: High far-right vote and high immigration concentrated in key productive sectors. 2. Xenophobic Imaginary Geography: Elevated far-right vote in areas with a low presence of immigrant populations. 3. Secession of the Privileged: Correlation between high far-right vote and high income. 4. Isolated Residential Municipalities: High far-right vote, low immigration, and low income. The work evidences that the anti-immigrant vote is determined by racialization and local segregation attitudes and opinions promoted in political discourses. This is an innovative finding that highlights recent forms of discrimination and institutional racism to migrant and minority populations.

keywords: Immigration, Discrimination, Lepenisation, Spain, African immigrants

Colorectal Cancer Mortality in Czechia: Trends and Demographic Impact (2000–2024)

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Colorectal cancer (CRC) has long been one of the leading causes of cancer mortality in Czechia. In recent decades, mortality has declined due to advances in treatment, earlier detection, and the introduction of a national screening program. This study quantifies the contribution of CRC mortality to life expectancy at birth (e_0) and how it has changed over the past two decades. We used national cause-of-death data from the Czech Statistical Office (2000–2024) to calculate CRC age-standardized mortality rates and e_0 for men and women. The impact of CRC mortality on e_0 was assessed using cause-deleted life tables and age-specific decomposition across selected reference years. Over time, CRC mortality declined steadily, and its contribution to life expectancy loss diminished. The hypothetical elimination of CRC mortality would have led to larger gains in e_0 in earlier years, particularly among men. Throughout the period, the age-specific contribution remained consistently concentrated in the 65–79 age range, with only minor variation over time. In all years, CRC mortality had a greater impact on male life expectancy than on female. These findings underscore the demographic impact of declining CRC mortality and reveal ongoing gender inequalities in its contribution to longevity.

keywords: colorectal cancer, mortality, life expectancy, Czechia

Association Between Education and Happiness in 19 European Countries: A Time Trend Analysis Based on the European Social Survey 2002–2024

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Happiness is an important indicator of well-being and reflects broader social conditions. Education, as a key social determinant, affects happiness both directly—by strengthening self-perception—and indirectly, through its impact on income and employment. Although average happiness has increased in Europe, differences between socioeconomic groups persist. In countries with a high percentage of tertiary-educated individuals, the added benefit of higher education may be smaller. The study examines long-term trends in educational inequalities in self-reported happiness among adults aged 25+ in 19 European countries between 2002 and 2024, using data from the European Social Survey. Nineteen countries with at least eight waves of valid data and consistent educational classifications were included. Education was categorized into three levels: primary (ISCED 0–2), secondary (ISCED 3–4), and tertiary (ISCED 5–6). Mean happiness scores (based on an 11-point scale) were calculated

by gender and educational level for each country and wave. Statistical differences between educational groups were assessed using ANOVA. We find that individuals with higher education report greater levels of happiness, although the gap between educational groups has narrowed over time. Women consistently report higher happiness than men. Denmark shows the highest and most equal levels of happiness, while Hungary records the lowest levels and widest educational gaps. A marked decline in happiness is observed in several countries during the COVID-19 pandemic. These findings highlight persistent, yet diminishing, educational differences in happiness across Europe and underscore the importance of monitoring well-being disparities as part of broader social policy efforts.

keywords: happiness, educational inequalities, ESS, Europe

Escaping the Work–Family Balance Norm: Stay-at-Home Mothers and Women Who Forgo Motherhood

Marie Varoqui, University of Strasbourg

This thesis analyzes the norm of work-family balance by focusing on women who escape it: those who remain childless or forgo additional children, and those who withdraw from the labor market to dedicate themselves to family. By identifying social, cultural, economic, political, and individual factors influencing these choices, the study aims to critically assess the notion of “choice” in these configurations and explore the role of renunciation and adaptation relative to initial life plans. The study focuses both on the construction and dissemination of this norm through public policies and everyday interactions, and on the developments that lead some women to turn away from it despite social pressure. Studying the norm from its margins highlights its constraints, as well as the resistance and tensions that challenge it. Contemporary developments observed in France will be analyzed in light of similar cases in other European countries. A mixed-methods approach will be employed. Quantitative analyses will draw on the GGS-II survey to examine profiles and family and professional trajectories of these women in France and across Europe. Interviews will complement this work to explore their values, relationship to public policies, the forms of social pressure they may experience, and the narratives used to present their situations. This thesis, starting in December 2025, aims to contribute to the field of work-family balance by enhancing our understanding of contemporary transformations in the relationship to work, family, and the state, as well as the decline of France’s distinctive fertility model in Europe.

keywords: work-familie balance, stay-at-home mothers, childlessness

Life Expectancy Can Be Misleading: Re-evaluating Mortality Trends in Selected Countries – Canada, US and UK (Benchmarking with Japan)

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Recent mortality slowdowns in high-income countries have often been evaluated using life expectancy at birth (e_0), a metric whose sensitivity diminishes as mortality shifts to older ages, potentially creating an artificial impression of stagnation. This paper introduces the Segmented Interpretable Lee–Carter (SI-LC) model, which endogenously detects structural breaks in mortality trends and produces a reparametrized longevity index (nt) that approximates the Geometric Mean of Age-Specific Death Rates. Unlike e_0 , this measure is less affected by changes in life table entropy, providing a more accurate view of mortality dynamics. Applying the SI-LC model to Canada, the US, and the UK (with Japan as benchmark), we show that the recent ‘stall’ in life expectancy reflects, in some measure, measurement artifacts. The underlying index reveals continued improvement, highlighting complex dynamics that e_0 masks and emphasizing the need for robust alternatives in mortality assessment in high-life-expectancy countries.

keywords: mortality trends, life expectancy measurement, High-income countries

Demographic Divergence in the Post-Yugoslav Space: Recent Trends in the Non-EU Successor States

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The breakup of Yugoslavia produced significant demographic consequences. Thirty years later, Croatia and Slovenia have become members of the European Union, while the other successor states have taken different paths outside it. This study explores how the populations of these non-EU countries have developed since 2007—the year when the last successor state gained international recognition—with the goal of understanding why their demographic trends have diverged. Using census data, national statistics, and existing research, the study examines key aspects of population change, including fertility, mortality, and migration. It compares indicators such as total fertility rate, crude birth and death rates, net migration, and median age to shed light on how demographic dynamics differ across Serbia, Bosnia and Herzegovina, Montenegro, North Macedonia, and the partially recognized Kosovo.

keywords: Former Yugoslavia, demographic trends, fertility, mortality, migration, non-EU successor states

Beyond Averages: Lifespan Inequality Among Migrants and Natives in Belgium, Norway, Sweden, and England&Wales

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Migrants to high-income countries typically have higher life expectancies than native populations. However, standard mortality estimates can mask variability in ages at death within migrant groups. This study asks: How diverse are migrant populations in terms of mortality? How does their inter-individual mortality disparity compare to that of natives? Has this picture changed over the past decades? We apply life-table-based measures of lifespan inequality—lifespan disparity (e^+) as an absolute measure and the entropy (H) as a relative measure—using official mortality and population data from Belgium, Norway, Sweden, and England & Wales from 1991 to 2021. In general, as expected, higher life expectancy is associated with lower life disparity - a pattern that holds for migrants as well. Over time, life expectancy increases while life disparity decreases, reflecting overall improvements in survival for both migrants and natives. Because migrants often have higher life expectancy than natives, they also tend to have lower life disparity. However, at similar levels of life expectancy, migrants show higher life disparity in Sweden, Norway, and the UK (men), and lower life disparity in Belgium and the UK (women). The differences between natives and migrants, as well as temporal changes, will be decomposed into age-specific contributions to dive deeper into the reasons behind this pattern. Lifespan inequality indicators capture not only population-level heterogeneity but also individual-level uncertainty in the timing of death—an uncertainty that shapes human decisions. Understanding these dynamics can deepen knowledge of migrant mortality and better inform equitable health policies.

keywords: lifespan inequality, migrant mortality, life tables

Variation in Social Determinants of Health across 27 European countries in 2024 - A Comparative Analysis using Principal Component Analysis

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Epidemiology and Public Health have extensively studied the relevance of diverse social determinants of health in explaining the wellbeing of European populations. Despite the well-known interconnectedness between determinants and across contexts, empirical work continues to overwhelmingly focus on narrow pathways of risk. This results in fragmented knowledge and shortcomings when translating public health science into policy. In this study we adopt a political

economy perspective, guided by the framework developed by the WHO Commission on Social Determinants of Health (SDoH), to offer the most comprehensive comparative overview to date of SDoH across 27 European countries. Using data from the newest Round of the European Social Survey, we use Principal Component Analysis to transform 24 variables into seven comparative “risk indexes”. These seven indexes are built in line with the WHO framework, and represent material, behavioral, occupational, educational, psychosocial, social capital, and healthcare determinants. Preliminary results show different degrees of variability in the distribution of SDoH across Europe. The burden of different dimensions of risk vary according to regime, country and sex. These findings highlight the need to understand this unequal distribution when doing comparative research across Europe, as well as the importance of policies tailored to specific contexts.

keywords: Social Determinants of Health, Comparative Politics, Welfare regimes

Cross-border reproductive care in times of pandemic and ART legislation changes in European countries: a population based study

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Cross-border reproductive care (CBRC) in Europe is shaped by legislative differences, treatment costs, accessibility, and socio-cultural preferences. The COVID-19 pandemic disrupted these dynamics through lockdowns, travel bans, and shifting regulations, which temporarily limited access to medically assisted reproduction (MAR) and assisted reproductive technologies (ART). This poster examines how the pandemic affected the dynamics of CBRC in Czechia, one of the key European destinations for infertility treatment, focusing on changes in the volume and structure of ART cycles during 2020 and 2021. The analysis is based on anonymised individual data from the National Registry of Assisted Reproduction and includes 261,571 ART cycles initiated between 2016 and 2021, of which 36% were cycles of foreign patients. Before the pandemic, the share of CBRC increased from 36% in 2016 to 38% in 2019. In 2020, the total number of ART cycles decreased by 14%, and CBRC by 27%. However, the magnitude of this decline varied across patients’ countries of origin: sharp decreases occurred among patients from Germany, Ireland, and the United Kingdom, whereas the number of cycles from Poland and Hungary rose, and moderate growth continued among patients from Austria and France. The findings highlight that while COVID-19 temporarily reduced cross-border access to ART, long-term CBRC trends are primarily driven by legal and structural conditions in patients’ home countries.

keywords: Assisted reproductive technology, cross-border reproductive care, COVID-19, Czechia

Vaccinated vs. Unvaccinated: Women with Diverging Fertility Patterns

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The COVID-19 vaccination prompted widespread speculation about its effects on fertility. This study explores fertility patterns among vaccinated and unvaccinated women in Czechia, using individual-level data from the National Health Information System. By linking the register of COVID-19 vaccination with the maternity register, we analyse fertility behaviour within selected female birth cohorts (1976–1991) with childbirth records from 1994 to 2024. Vaccination status is defined as receiving at least one dose of a COVID-19 vaccine. Fertility is observed both before and after vaccination, including the pre-pandemic period, allowing us to assess whether differences between vaccinated and unvaccinated women existed independently of the pandemic or vaccination itself. Our analysis employs the Parity-and-Vaccination Conditional Age-Specific Fertility Rate. This measure effectively controls for pre-existing demographic differences by restricting exposure only to women at risk of a specific birth order. Results confirm significant, pre-existing behavioral heterogeneity: the probability of a first birth is consistently higher among vaccinated women. Conversely, unvaccinated women show higher

probabilities of progressing to second and higher-order births, often at younger ages, indicating potential socioeconomic disparities. We conclude that the observed divergence in fertility is driven by pre-existing structural factors (parity, timing, SES), not by vaccine effects per se. Furthermore, the overall post-pandemic fertility decline is evident in both groups. Our findings underscore the critical need for robust methodological control, concluding that without it, any direct association between COVID-19 vaccination and fertility remains inconclusive.

keywords: COVID-19 vaccination, Fertility, Czechia

Delayed Transitions? Navigating Young Adulthood While Living with Parents in Contemporary Europe

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Across Europe, increasing proportions of young adults remain in parental homes, challenging traditional adulthood markers. In 2019, 31% of Europeans aged 25-34 lived with parents, varying dramatically from 4% in Denmark to over 50% in Southern Europe. Using Generations and Gender Survey data Rounds I and II (2004-2022), we examine factors driving prolonged intergenerational co-residence and its implications for life course transitions, focusing on the Czech Republic. Preliminary findings reveal Czech Republic exhibited Europe's highest co-residence rates in 2005 (42% of young adults), declining to 20% by 2020-2022, yet remaining high by Western European standards. Estonia demonstrates similar decline (30% to 10%), while Netherlands shows contrasting increase (12% to 19%). Remarkably, despite high co-residence rates, young adults across all studied countries report strong intentions to establish independent households within three years, with Nordic countries showing highest mobility intentions. This contradiction between current living arrangements and future aspirations is particularly pronounced in post-socialist contexts, where structural constraints housing affordability, labor market conditions, welfare regime characteristics delay residential independence without diminishing autonomy aspirations. The persistence of high mobility intentions despite prolonged co-residence highlights tensions between housing aspirations and material realities in contemporary Europe, suggesting co-residence represents complex negotiations of economic necessity, cultural norms, and family strategies amid housing crisis.

keywords: young adults, housing transitions, Europe, GGS