

PhD in Social and Political Science
Bocconi University
Academic Year 2023-24

41023 Demography (24 hours)

Professor Letizia Mencarini

DRAFT

The course is designed to introduce students to basic concepts of demographic measurement and modelling used to study changes in population size and composition. The course covers basic measures of mortality, fertility and migration; life table construction; stable populations; population projections; and age patterns of vital events. It will also introduce the main demographic theories to explain past trends and current demographic change. It will be privileged the macro/aggregate perspective.

Possible general textbook:

Lutz (2021) Advanced introduction to demography, Elgar. [\(on line in the Library\)](#)

Possible methodological demographic textbooks:

Preston (2000), Demography, Blackwell

Rowland (2003), Demographic methods and concepts, Oxford

Wachter (2014) Essential Demographic Methods, Harvard University Press [\(on line in the Library\)](#)

Weeks (2021) Population. An introduction to Concepts and Issues, 13TH edition, Cengage-

Readings

Various published papers indicated in the detailed syllabus. Each student will briefly present in class two papers and a critical and discussion stimulating way

Assessment:

1/3 in class participation,

1/3 in class short presentations (3 each),

1/3 prospective/perspective paper

Provisional detailed schedule and syllabus

| # | Date | Time | Title | Specific topics | Readings – papers to be presented and discussed in class (there are all in Bb) | Name of presenters (you need to be there in two different lectures) |
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| 1 | Mon. 6 Nov 23- | 14:45 – 16:15 | Introduction: | Demography and/or population studies; from macro to micro to macro; Population change | Chapter 1 Lutz, Demography | N/A |
| 2 | Friday. 10 Nov 23- | 14:45 – 16:15 | Mortality | The theory of the demographic and mortality transition. Measuring mortality: crude rates and life–tables (cohort and period) | Lee R. (The Demographic Transition: Three Centuries of Fundamental Change | N/A |
| 3 | Mon.13 Nov23 | 14:45 – 16:15 | | Past, current and future trends in mortality and survival. Heterogeneity | <p>(1) <u>Mortality/survival trend & theories:</u></p> <ul style="list-style-type: none"> - 1.1.: Oeppen & Vaupel (2002) Broken Limits to Life Expectancy, Science - 1.2.: Vaupel (2010) Biodemography of human ageing, Nature -1.3: Dong et al (2016) Evidence for a limit to human lifespan, Nature -1.4.: Barbi (2018) The plateau of human mortality: Demography of longevity pioneers, Science <p>(2) <u>Mortality/survival differentials</u></p> <ul style="list-style-type: none"> - 2.1. Zarulli et al. (2018) Women live longer than men even during severe famines and epidemics, PNAS - 2.2.: Feraldi&Zarulli (2022) Patterns in age and cause of death contribution to the sex gap in life expectancy: a comparison among ten countries, Genus -.2.3.: Vaupelet al (2011) Life expectancy and disparity: an international comparison of life table data. BMJ -2.3.: Roffia (2022)Determinants of life expectancy at birth: a longitudinal study on OECD countries, , International Journal of Health Economics and Management | |
| 4 | Wed. 15 Nov 23- | 14:45 – 16:15 | | Effect of Covid-19 on mortality levels | <p>(3) <u>“Instant” papers during the pandemic</u></p> <ul style="list-style-type: none"> - 3.1. Dowd et al. (2020) Demographic science aids in understanding the spread and fatality rates of COVI-19, PNAS; - 3.2. letter to Dowd, in PNAS | |

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| | | | | | <ul style="list-style-type: none"> - 3.3. answer by Dowd, in PNAS - 3.4. Arpino et al (2020) No clear association emerges between intergenerational relationship and COVID-19, fatality rates from macro-level analyses, PNAS <p><u>(4) Life expectancy changes because COVID-19</u></p> <ul style="list-style-type: none"> - 4.1.: Aburto (2022) Quantifying impact of the COVID-19 pandemic through life-expectancy losses..., International Journ. of Epidemiology - 4.2.: Scholey et al (2022), Life expectancy changes since COVID-19, Nature Human Behaviour - 4.3. Karlinsky&Kobak (2021) Tracking excess mortality across countries during the COVID-19 pandemic with the World Mortality Dataset, eLife. | |
| 5 | Mon. 20 Nov 23 | 14:45 – 16:15 | Fertility | Measurement of fertility | Basics | |
| 6 | Wed. 22 Nov 23 | 14:45 – 16:15 | | <p>Past and current trends in fertility</p> <p>Fertility transition theory</p> <p>Proximate determinants of fertility</p> | <p><u>(5) 1st and 2nd Demographic transition</u></p> <ul style="list-style-type: none"> - van de Walle van de Walle, E. (1992). Fertility transition, conscious choice, and numeracy, Demography, 29(4), 487–502. - Lee (2003) The Demographic Transition: Three Centuries of Fundamental Change, JEP - Lutz (2022) Cognition-driven demographic transition, N-IUSSP and Advanced introduction to demography (in biblio on-line) - Lesthaeghe (2014) The second demographic transition: A concise overview of its development, PNAS <p><u>(6) Macro relationship between fertility and development</u></p> <ul style="list-style-type: none"> - Paper in Nature (2009) by Myrskylä et al on "Advances in development reverse fertility declines" - (2021) by Gaddy on "A decade of TFR declines suggests no relationship between development and sub-replacement fertility rebounds" - Greulich & Thevenon 2013 The Impact of Family Policies on Fertility Trends in Developed Countries - Kalwji (2010) The impact of family policy expenditures on fertility in Western Europe. Demography | |

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| 7 | | 16:30 – 18:00 | | Determinants of low and high fertility | <p><u>(7) High fertility</u></p> <ul style="list-style-type: none"> - Aisha Dasgupta et al. (2022) Contraceptive use and fertility transitions: The distinctive experience of sub-Saharan Africa, <i>Demographic Research</i>, 46, (97-130). - Bongaarts J, Casterline J (2013). Fertility transition: Is sub-Saharan Africa different? <i>Popul Dev Rev</i> 38, 153–168. - Kebede et al (2018) Stalls in Africa’s fertility decline partly result from disruptions in female education, <i>PNAS</i> - Liu & Raftery (2020) How Do Education and Family Planning Accelerate Fertility Decline?, <i>PDR</i> <p><u>(8) Very low fertility</u></p> <ul style="list-style-type: none"> - Kohler et al. The Emergence of Lowest-Low Fertility in Europe During the 1990s, <i>PDR</i>, 2002 (only first part, until page 652) - Myrskylä et al. (2013), New Cohort Fertility Forecasts for the Developed World: Rises, Falls, and Reversals, <i>PDR</i>, 2013. - Sobotka (2021) World’s Highest Childlessness Levels in East Asia, <i>Population & Societies</i> - Lutz, Wolfgang. “Fertility Will Be Determined by the Changing Ideal Family Size and the Empowerment to Reach These Targets.” <i>Vienna Yearbook of Population Research</i> 18 (2020): 63–70. https://www.jstor.org/stable/27041930. | |
| 8 | Friday 24 Nov 23- | 14:45 – 16:15 | Population structure | Measurement, modelling, pop projections, momentum Age transition and stratification | Basics | |
| 9 | Mond 27 Nov 23 | 14:45 – 16:15 | | Re-measuring aging: who is old and life course Role of migration | <p><u>(9) Who is old</u></p> <ul style="list-style-type: none"> - 2005 Nature's paper, Average remaining lifetimes can increase as human populations age Warren C. Sanderson & Sergei Scherbov - 2010 Science's paper, Remeasuring Aging, Warren C. Sanderson and Sergei Scherbov - 2013 PDR The Characteristics Approach to the Measurement of Population Aging, by C. Sanderson and Sergei Scherbov - 2015 PDR's paper Are We Overly Dependent on Conventional Dependency Ratios?, by Sanderson Scherbov | |

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| | | | | | <p><u>(10) Replacement migration</u></p> <ul style="list-style-type: none"> - UN (2000) Replacement Migration: Is it A Solution to Declining and Ageing Populations? (study only the PRB review& summary) - Craveiro (et al.) (2019) Back to replacement migration: A new European perspective applying the prospective age concept, DEMOGRAPHIC RESEARCH, 40(45), 1323-1344 - Wilson et al., Migration and international replacement in Europe, PDR, 39(19), 2013 - Billari, Francesco C. and Gianpiero Dalla-Zuanna. 2011. "Is replacement migration - Janicki & Ledwith (2021) Replacement migration on the edge of the European Union: Wasting human capital? | |
| 10 | Wed 29 Nov 23 | 14:45 – 16:15 | | Demographic dividend theory | <p><u>(11) Demographic dividend</u></p> <ul style="list-style-type: none"> - Lutz et al (2019) Education rather than age structure brings demographic dividend, PNAS - Gribble and Bremmer (2012) Achieving the demographic dividend, PBR - Henrik Urdal (2006) A clash of generations? Youth bulges and political violence International studies quarterly 50 (3), 607-629 - Lam (2007) The Demography and Economics of the World's "Youth Bulge", short report World Bank | |
| 11 | Friday. 1 Dec 23- | 14:45 – 16:15 | Still on ageing | | <p><u>(12) Ageing</u></p> <ul style="list-style-type: none"> - Smeeding (2014) Adjusting to fertility bust, Science 346 - Lee et al (2014) Is low fertility really a problem? Population aging, dependency, and consumption, Science 346 - Lee et al (2017) Does Fertility or Mortality Drive Contemporary Population Aging? The Revisionist View Revisited, PDR - OECD (2017), Preventing Ageing Unequally (report) chapter 3: Recent trends toward increased inequality among future retirees OECD Publishing, Paris. | |

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| 12 | Mond 4 Dec 23 | | World population growth and decline, environment and global sustainability | Brief history Slow and fast growing Global variation and redistribution The Malthusian and Marxian perspectives | Basics | |
| | | | | Population and resources in the short, long run and in the future, Neglected topics in demography in this course | <p><u>(13)(14)(15)</u></p> <ul style="list-style-type: none"> - Lam, D. (2011). How the World Survived the Population Bomb: Lessons From 50 Years of Extraordinary Demographic History. <i>Demography</i>, 48(4): 1231-1262. - Becker S. (2013) Has the World Really Survived the Population Bomb?, <i>Demography</i>, 50(6): 2173-2181 - Lam, David. 2013. "Reply to Stan Becker, "Has the World Really Survived the Population Bomb? <i>Demography</i>, 50(6): 2183-2186 - Hardin (1968), The tragedy of commons, <i>Science</i> - Christ et al. (2017) The interaction of human population, food production, and biodiversity protection, <i>Science</i> - Aleksandrowicz et al (2016) The Impacts of Dietary Change on Greenhouse Gas Emissions, Land Use, Water Use, and Health: A Systematic Review. <i>PLoS ONE</i> - Smil, V. (2002), Eating Meat: Evolution, Patterns, and Consequences. <i>Population and Development Review</i>, 28: 599-639 - Entwisle (2021) Population Responses to Environmental Change: Looking Back, Looking Forward, <i>Population en</i> | |