

Urban demography – New approaches using longitudinal micro-level data

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A longitudinal approach to the study of demographic or socioeconomic patterns has mostly been used for modern societies with available register or survey data. In historical demography, similar studies based on family reconstitutions have been made for local populations in rural areas in the 19th century, but seldom have urban populations been included. Today this picture is about to change. New data have been gathered including both rural and urban populations, covering the period from the 19th century till today. This session includes papers using new individual-level datasets for urban populations.

The Anthropometrics of War, Famine and Development: Helsinki schoolchildren, 1910-1932

Sakari Saaritsa, University of Helsinki

Joël Floris, University of Zürich

Tuuli Hurme, University of Helsinki

This project is based on rare individual level health records of c. 18,000 Helsinki primary school students of both sexes in the years 1910-1932, fully digitized for the first time in 2020. The data will be used to analyze the effects of major historical shocks, in particular the Finnish Civil War of 1918 and the disruptions in food supply in 1917-1919, on the nutritional status and growth patterns of children. The school health cards of Helsinki are in many ways a unique source. The primary school data contain both sexes. Historical anthropometric data on females is still scarce (Steckel, 2009; Koepke et. al., 2018). School data have fewer selection issues than the classic sources of anthropometric data such as armies and prisons (A'Hearn, 2004). The covered period, 1910-1932, includes major crises, particularly 1917-1919, and the volume of observations is large enough for analysing trends and social decomposition with adequate statistical power. In addition it is unique that the individual records have survived: the few studies analysing anthropometric measures of children in the context of World War I have had to rely on summary statistics (Harris, 1993; Cox, 2015). Using measurement of schoolchildren to assess nutritional status and health has several advantages (Cox, 2015): Children are more sensitive to changes in nutritional status; thus negative environmental impacts are more immediately seen in children's stature and growth than in adult measurements; deficit during deprivation can be masked in later years through catch-up growth; and finally, negative impact in childhood increases risk of disease and likelihood of mortality in adulthood. Thus a number of approaches for developing metrics of health status on the basis of the data are possible. External references like the new universal WHO growth standard designed for contemporary developing countries, providing highly precise benchmarks on height and weight for boys and girls of different ages (WHO 2007) or the Finnish national scale (detailed data in PI's possession), can be applied to determine the extent of harmful stunting by modern standards. As an application to the crisis of 1918, the following analyses are attainable: measurement of BMI and weight changes during the crisis itself in order to understand the severity and incidence of the immediate nutrition shock among children already at school; comparison of effects on stunting and estimation of compensatory growth among cohorts that were hit by the crisis at different ages; and comparison of cohorts born during and right after the crisis. All of the above can be done with conditional distributions using school catchment areas as proxy for

SES variation, as well as by sex. While 1918 has mainly been depicted as a political event and as a tragedy of violence, its human development implications have been neglected, particularly considering the severity of the shock. This project will work towards measures of the cost of the conflict in damaged human capital.

Population flows in times of economic growth and recession: the case of Landskrona.

Anna Tegunimataka, Lund University
Patrick Svensson, Swedish University of Agricultural Sciences
Finn Hedefalk, Lund University

Twentieth century Swedish urban development was to a large extent associated with the rise and the fall of the industrial cities. The first half of the century was a period of rapid urbanization related to the expansion of industries and an increasing location of these to urban areas. Circular migration between the city and the countryside was replaced by permanent immigration to urban areas. After the Second World War, the golden age of Swedish industry meant further expansion facilitated by state planning of both agriculture and industry to allocate workers to high productivity sectors. Thereafter followed rationalizations and increased international competition for the Swedish main industries, ending in the 1970s crises. A new expansion based on new types of industries and services started in the late century and progressed into the 21st century. All this interacted with urban growth and the migration of people in and out of the cities.

This paper aims to describe the population growth and stagnation of the Swedish city Landskrona. We focus on inflows and outflows and emphasize especially heterogeneities in terms of socio-economic status, gender, origin, and age. Our longitudinal data for Landskrona allow us to study the mobility of Landskrona's population in five important time-periods that correspond to major social, economic, and political developments in Sweden and Landskrona (1905-29, 1930-49, 1950-74, 1975-94, and 1995-2015). These five time-periods will serve as a backdrop for studying the characteristics of those moving to and from Landskrona, displaying the changing structure of Landskrona's population, while also illustrating the spatial change within the city.

Water infrastructure and neighborhood change – the case of the Stockholm water network 1878 – 1915

Martin Önnersfors, Lund University

Industrialisation saw a large increase in public investments in cities, many of which were changes to the built environment. A common type of investment were physical networks, which were built to enhance transportation, communication and sanitation. Although these networks aim foremost to deliver a service, their value combined with their slow spread in the city can create unintended external effects and change desirability of a neighbourhood. Changes in desirability from a new public investment can in turn affect the building market and rents, and thereby alter the social composition of a neighbourhood. This possible triggering of upwards

social trajectory (gentrification) has also been argued to drive displacement of lower SES groups, which has been shown in modern settings from public transport investments. Despite the fact that public investments were very common in European and North American cities during industrialisation, little has been shown of how they affected SES composition of affected neighbourhoods. This study aims to address this knowledge gap by studying a public investment in the Södermalm district of Stockholm between 1878 and 1915. The roll-out of the investment (a water network) can be followed at its most detailed level (the building) and population movements are recorded with high precision, including individual-level SES data. The effect of being connected to the water network on a building's SES composition is modelled using a fixed-effects OLS estimator. The results show that buildings connected to the water network experience a change in SES composition in the long run, with an average 5-6 percentage point increase in white-collar share over a period of 30 years. A corresponding effect in the short run (measured as a level effect) is not found, which is interpreted as an indication that there was no steep rent increases immediately after connection. The long-term trend results are robust to a narrowing of the yearly bandwidth around the installation year. In summary, the results suggest that the public actor in charge of the investment succeeded in making the water network affordable also for lower SES classes, since there was no immediate change in composition following connection. The effects on SES composition in the long run are more likely to be driven by SES-specific preference operating on the building market, thereby out of control of the public actor. In the case of the Stockholm water network, a public investment was likely a driver of neighbourhood change and a component in creating the horizontally segregated city we see today.

Urban-rural Patterns of Leaving Home: Local Populations in Sweden 1900-1950

Martin Dribe, Lund University
Christer Lundh, University of Gothenburg
Glenn Sandström, Umeå University

The paper compares the patterns and determinants of leaving home in Sweden from the early 20th century to the 1950s, focusing urban-rural similarities and differences. We study the context of home leaving, for instance leaving for a job as an apprentice or domestic servant living in the master's household, leaving for marriage setting up a new household, or moving for a job or studies and non-familial living. We also study the household-level factors behind leaving the parental home, for example class background, number of siblings in the parental home, and the presence/absence of one or both parents. The analysis includes the gender dimension of the home-leaving patterns, and potential differences between urban and rural areas. We use longitudinal individual-level data from three population databases included in the SwedPop infrastructure: the Scanian Economic and Demographic Database (SEDD), the POPLINK Database and Gothenburg Population Panel (GOPP). The studied local urban populations were located in Landskrona, Gothenburg and Umeå/Skellefteå, and the rural populations were situated in the province Scania in southern Sweden and Västerbotten county in the north. For the first time, data from these data bases are integrated into one and the same study. Data have been harmonized, for instance in relation to occupation and social class (for which we use the HISCO-HISCLASS classification system). Analyses are based on logistic regression models.

Gender discrimination in infancy and childhood during the 1891/92 Russian Famine

Viktor Malein, University of Southern Denmark

Francisco J. Beltrán Tapia, Norwegian University of Science and Technology

Relying on sex ratios, this article examines the impact of the 1891-92 Russian famine on the sex-specific mortality of boys and girls. Contrary to the previous literature that stresses the male vulnerability in harsh environments, our results show that the famine hardly altered sex ratios (if anything, sex ratios increased slightly), despite it killed a large number of infants and children. This result suggests that gender discriminatory practices that prioritised boys compensated the male vulnerability. Likewise, this article shows that the effect significantly varied across different ethnic groups and suggest that gender-discriminatory practices were not only in place among the Orthodox majority, but was especially strong among Muslim communities and the Old Believers (a conservative ramification of the Orthodox Church).

Mobility and earnings in an urban labor market: Gothenburg 1915-1943

Tobias Karlsson, Lund University

Christer Lundh, University of Gothenburg

Labor is often described as a ‘quasi-fixed’ factor of production. Costs for screening, recruitment and training create incentives for long-term attachments between employers and employees. While we have a fairly good idea of labor mobility in recent decades, our knowledge of mobility patterns in the past is poor. Most historical studies on labor mobility are based on cross-sectional data on job tenure from particular industries or longitudinal data from individual firms. These approaches have clear limitations. In this paper we take a different approach as we use longitudinal individual-level data of inter-firm mobility. We use data for a 1-percent sample of individuals residing in the city of Gothenburg at some point between 1915 and 1943 from the registers of local tax authorities. The registers include information on occupation, employer, income, civil status and family composition, among other things. The purpose of the paper is to present evidence of the intensity and determinants of inter-firm labor mobility. Among other things, we address questions about the characteristics of ‘movers’ and ‘stayers’ in this setting; for example, concerning differences between men and women, skilled and unskilled workers, blue-collar and white-collar, married and unmarried etc. We also look into how intra-firm labor mobility was related to residential mobility, occupational careers and earnings.