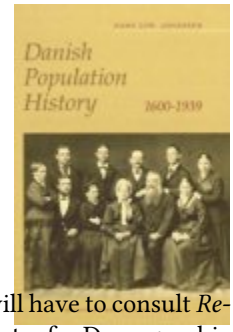
H-Net Reviews
in the Humanities & Social Sciences

Hans Chr. Johansen. *Danish Population History, 1600-1939.* Odense: University Press of Southern Denmark, 2002. 246 pp. $33.00 (cloth), ISBN 978-87-7838-725-7.



Reviewed by Sølvi Sogner (Department of History, University of Oslo)
Published on H-Skand (December, 2003)

Professor Hans Christian Johansen, a founding name of historical demography in Denmark and widely acclaimed professional on the international arena of economic history, has presented us with such a rarity as a monograph of his country's population history, covering 300 years. In 1998, sensible research administrators in The Danish National Research Foundation saw fit to finance the Danish Center for Demographic Research for five years to complete this project, and wisely put Professor Johansen in charge. They, and we, have been richly rewarded with the book at hand, which is an outcome of that effort.

Professor Johansen's previous historical demographic research has mainly focused on the eighteenth century, a century that represents a major turning point in the development of economic and political history in Denmark, following the liberalization of the country's farming population. Johansen's eye has always been drawn toward the larger issues and national developments, and in 1975 he published a path-breaking study on a representative sample of rural parishes, based on the parish registers and the nominative censuses of 1789 and 1801. This, his most recent contribution to the field, is a "wide-screening." project that includes the seventeenth as well as the nineteenth and first half of the twentieth centuries.

The approach is a combination of micro and macro levels. Earlier research is presented and discussed, and are other available sources. In collaboration with Jim Oeppen from the Cambridge Group of Population and Social Structure, Johansen established new time series of births and deaths from 1665 onwards at the Center, and analyzed them by means of a new method, Generalized Inversion Projection (GIP). For information about the method in practice, the reader will have to consult *Research Report 21* from the Danish Center for Demographic Research. Here we are neatly presented with the outcome, all sweat and tears removed. The results are carefully considered, and compared to findings made by more conventional methods. For this purpose, data from censuses and parish registers have been digitized, partly at the Department of History at the University of Southern Denmark (as Odense university is now called), partly at the Danish Data Archives, and at the Center itself. Thus analyses of data sets of cohorts from different periods, from "11 parishes," "26 parishes," etc. appear regularly in the text and back up the arguments for periods prior to the statistical period proper, i.e. after 1890.

A rich array of figures, tables and maps complement the text. It was never professor Johansen's habit to tire his readers with long-winded paragraphs. He enjoys handling his materials dexterously and in ingenious ways, to rivet our attention, make the research look easy, and challenge more conventional approaches. The delimitation of the area investigated, Denmark, is understood in this study as "that area which belonged to the kingdom of Denmark proper between 1660 and 1864 and after a few border changes from 1864 to 1920" (p. 10). This means that we are reading the demographic history of present-day Denmark, with the exception that the county of Southern Jutland (Sønderjylland), which was not acquired until after World War I. (Interestingly, in this county are found the oldest surviving parish registers, dating from the 1570s, indicating that the practice of keeping parish registers comes from the German-speaking regions in the south.)

The book is divided into five parts: the early seventeenth century, the old regime (1665-1775), the early

mortality decline (1775-1840), nineteenth-century population growth (1840-1890), and simultaneous fertility and mortality decline (1890-1939). The wealth of new findings and the careful evaluation of older findings in these sections make each an indispensable platform for future research. As it is impossible to do justice to the entire richness of the book in a simple review, I shall restrain my comments to the old regime, prior to 1840 (the less well-known part of our demographic past), and to the research on mortality.

The Early Seventeenth Century

The oldest extant parish registers are dated to 1611. These are the baptism lists from Nordby on the island of Fanø, in Western Jutland. A few other registers begin in the 1620s. In 1645-46 the King demanded from his seven Lutheran bishops that all vicars keep parish registers of births, marriages, and deaths. In laying down this policy, the King interestingly did not make reference to his ecclesiastical role, as we might have expected him to do (as official head of the Church) (p. 16). This new practice took some time to implement, and it was not until the 1660s that a reasonable system was set in place, which allowed for a representative assessment.

>From the nineteenth century, onward, historians have primarily used parish registers to study the size of populations. A number of estimates, based mainly on the number of farms, have ranged between 500,000 and one million for the mid-seventeenth century. Johansen's estimate for the Danish population in 1600 is 500-600,000, and is roughly the same circa 1650. He finds that it was not until the end of the eighteenth century that the total population figures begin climbing significantly, and steadily, above this level. Today, Denmark has a population of slightly more than five million.

In the beginning of the seventeenth century, eighty-five percent of the population lived in the countryside, in roughly 1,500 rural parishes, averaging 300-400 inhabitants each. Copenhagen may have had 25,000 inhabitants. Another 40,000 people lived in roughly seventy other small market towns. The bulk of the land–ninety percent–was owned by nobility, Church, and King, and leased for a lifetime as small farms to tenant-farmers, in exchange for an annual rent and villeinage on the owner's estate. On an average year, the agricultural economy could feed the entire population and supply a small surplus for export (i.e. rye and oxen). The seventeenth century is virtually a *terra incognita* in Scandinavian demography. For this reason, great interest is attached to the oldest parish registers. They are presented carefully, with a description of all of their lacunae and shortcomings. Some have been analyzed in allignment with the oldest local population counts, dating from 1645, which registering individuals above the age of 15, living on the islands of Sealand, Møn, Falster and Lolland (117,000). Longitudinal births and deaths counts show large and at times quite erratic fluctuations in the burial list records, and more steady record-keeping trends for births and baptisms. Flaws and gaps in these sources persuade Johansen to opt for micro-level studies. Four rural parishes, with a total population of almost 2,000 people qualify for his further scrutiny: in Jutland (subdivided into three entities [or *sogn*, in Danish]: Fårup, Lading and Sabro), Elmelunde (in Møn), Tårnborg, and Sørbymagle (in Sealand). Johansen's most substantial finding from this comparison seems to be that the fluctuations in mortality were more violent in the seventeenth century, than we know them to be in the eighteenth. This is quite reasonable, as Denmark in the seventeenth century was hit heavily by epidemics, and there were wars fought on Danish territory. After 1660, wars were never waged on home ground. In fact, after 1720 no real wars were fought at all during the eighteenth century. Apart from a few skirmishes, "Denmark entered its longest peace period ever" (p. 43).

The Old Regime (1665-1775)

Mortality continued to be a serious determinant of demographic development, however. In the period 1665-1775, in twenty-four out of 110 years, there were more deaths recorded than the number of births. Table 3.2 (p. 45) which compares demographic events and rye prices 1669-1775, demonstrates a highly significant co-variation between the number of deaths and rye-prices, showing that mortality was heavier in years following a poor harvest. Births were a second, less pronounced cause of death, over consecutive years.

In order to make his longitudinal comparison, Johansen used the GIP Method (referred to above). He presented (p. 44) two different versions of the outcome of a given model, which were dependent upon different underlying assumptions. In this way he was able to extend the well-known national time series of administratively collected information on annual deaths with a starting date of 1735, the first recorded year in Danish national demography, until now. Average life expectancy at birth was computed through GIP calculations, and assessed between the 1670s and the 1770s, at a relatively stable average of 35-40 years (p. 60).

Johansen makes another interesting comparison be-

tween provincial urban populations. Thirty-four towns initially having less than 1,000 inhabitants are compared during the time-frame of 1672-1787, based on a special listing from 1672 and the first nominative census of Denmark 1787. A twelve percent growth rate for all the towns combined is the outcome of highly differential growth patterns. Some towns doubled in size, while others were reduced by one third. A regional annual series of natural increase adds to the picture of internal migration patterns, where Jutland has the largest natural surplus, but also the highest out-migration.

This migration is of special interest if we consider that the ancient rule of strict ascription to the soil for tenants was abolished in East Denmark in 1702, but reintroduced in a modernized version in 1733 for all males aged 18-36 (making leave dependent upon the estate owner's permission). One wishes to learn more about the strictness of law enforcement, but the two pages devoted to migration (pp. 76-77) do not treat this question. Ascription was abolished 1788.

Based on samples from individual sources, rural household composition in 1704-05 underpins the claim that "the Danish pre-industrial household is in agreement with the north-western European pattern of predominantly two generation or simple households" (p. 49). Fertility, like mortality, shows an almost horizontal trend 1665-1775, whether based on family reconstitution studies or GIP-estimates (p. 75). A large body of research on the eighteenth century exists. Nine reconstitution studies (listed on p. 59) have been supplemented, and underpinned by a series of new family reconstitution studies. While earlier research found a twenty to twentfive percent infant mortality rate, new findings suggest a higher rate of between twenty-two and twenty-six percent. However, this trend fluctuates: Cohorts born between 1700-09 have higher infant mortality than the cohorts born 1670-79 and 1741-46

The Early Mortality Decline (1775-1840)

During this period, important changes took place within the agricultural sector. Over the course of half a century (between the 1760s and 1807), half of the commonlands were enclosed, and by 1837 practically all of them. People's houses were moved away from the village centers, and a more scattered settlement pattern developed. Living conditions changed, and improved hygiene led to a lessened spread of diseases. There were also changing patterns in property ownership. Only ten percent of farmers owned their farms in mid-eighteenth century; but by 1814 this had risen to two-thirds. Agricultural improvements took place, in general, with regard to crops, fertilizers, draining. Production is assessed to have doubled in the period from 1775 to 1840. This is the background against which the incipient decline in mortality is seen.

The availability of demographic statistics improved greatly during this period. Earlier estimates of the national population are evaluated against recent GIP-projection results, and existing micro-studies are used to fill in the general picture. The dramatic fluctuations representing a mortality crisis pattern disappear, and there is a general decrease in "normal" mortality for the period as a whole. The GIP-calculations for life expectancy at birth show that this change appears at around 1790. The period from 1815-1820 is exceptionally good, followed by a temporary set back at around 1830, during a disease-ridden period. Around 1835-1840, life expectancy at birth reached the level of 40-45 years, as opposed to an expectancy of 30-35 years between 1770-1780. Age-specific calculations in existing reconstitutions, and in a sample of cohorts born between 1775-1777 and 1815-1824, indicate that the decline may be attributed to the lowered mortality of infants and children:

"The decline in infant mortality between 1775 and 1849 by about one third has lowered the crude death rate by about 2 per 1000 inhabitants. [T]he total decline in the CDR is about 6 per thousand, which means that lower infant mortality is sufficient to explain about one third of the total decline in mortality" (p. 107).

The mortality rate of children between the ages of one and nine is more elusive to analyze due to migration. After various attempts to come to grips with the problem, Johansen concludes that "apart from the change in the number of deaths from smallpox the effect of a decline in the child mortality on the crude death rate has been modest" (p. 109). He singles out the main causes improved child mortality as related to better nutrition, the smallpox vaccination, and better childbirth techniques. The last two conditions are discussed further in a section on improvements in public health in the period.

Conclusive Remarks

The book at hand is a tour de force and a highly impressive contribution to Scandinavian historical demography, and to historical demography in general.

Despite the clarity and pertinence of the text, however, it is not an easy book to digest. One reason for this is the diversity of approaches. Another is the "well-

shaven" and polished exterior. The basic data that form the foundation of the analysis are presented in other publications, and no stray ends are left hanging to assist us in unraveling the text. It is much like dealing with a statistical publication. This is not a complaint. I am happy to be presented with the critically digested, actively reflected ingenious insights, into a highly complex, which is the result of more than three centuries of analytical effort. This book will become a standard reference, and an inexhaustible source of information and inspiration. In the near future, still other tantalizing projects await professor Johansen's expertise, no doubt.