

RAPPORTER

84/5

**BIBLIOGRAPHY OF POPULATION
STUDIES IN NORWAY**

**BIBLIOGRAFI OVER BEFOLKNINGS-
STUDIER I NORGE**

BY
BJØRG MOEN

STATISTISK SENTRALBYRÅ
CENTRAL BUREAU OF STATISTICS OF NORWAY

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EMNEGRUPPE
Population

ANDRE EMNEORD
Befolkning

PREFACE

In January 1978 The International Union for the Scientific Study of Population (IUSSP) convened a meeting in Budapest to discuss the need and possibility of having prepared a set of bibliographies on demographic literature from countries with languages that are not commonly understood internationally.

Representatives from 16 countries took part in the Budapest meeting. A number of them, among these also Norway, started work on a bibliography on their national demographic literature.

The Central Bureau of Statistics now presents the Norwegian demographic bibliography for the period 1945-1977 including some newer entries and an addendum, listing (without annotation) publications from the period 1978-1982.

Mrs. Bjørg Moen has been responsible for the collection and editing of the bibliography. She has been assisted by an advisory group, the members of which have i.a. been engaged in obtaining information on and making contacts with authors in their respective scientific milieus. Also the chief librarian of the Central Bureau of Statistics, Mrs. Randi Gran, gave valuable help through the advisory group.

Mr. Lars Østby prepared the publication list in the addendum. The list is based on the survey of publications given every year in Nordisk Demografi and in the annual publication list from the Sociodemographic Research Unit in the Central Bureau of Statistics. These entries are adjusted to the IUSSP requirements, and given a classification according to the IUSSP guidelines.

In accordance with the initial agreement, the publication will be published both by the Central Bureau of Statistics, and by the IUSSP.

Central Bureau of Statistics, Oslo, 28 February 1984

Arne Øien

FORORD

I januar 1978 holdt the International Union for the Scientific Study of Population (IUSSP) et møte i Budapest for å diskutere behov og muligheter for å lage et sett av bibliografier over demografisk litteratur fra land som tilhører små språkområder.

Representanter fra 16 land deltok i Budapest-møtet, og mange av dem, deriblant Norge, begynte arbeidet med nasjonale demografiske bibliografier.

Statistisk Sentralbyrå legger med dette fram en norsk kommentert demografisk bibliografi for perioden 1945-1977 med noen få nyere oppslag og med et tillegg (addendum) der publikasjoner fra perioden 1978-1982 er ført opp uten kommentarer.

Bjørge Moen har hatt ansvaret for innsamling av opplysninger og redigering av publikasjonen. Hun har i arbeidet hatt hjelp av et rådgivende utvalg. Medlemmene av utvalget har hjulpet til med å skaffe informasjon, og med å komme i kontakt med forfatterne innenfor de respektive fagmiljøene. Sjefsbibliotekar i Statistisk Sentralbyrå, Randi Gran, gav også verdifull hjelp gjennom sin deltakelse i det rådgivende utvalg.

Lars Østby har utarbeidet tillegget, som bygger på de årlige listene over nordiske demografiske publikasjoner fra Nordisk Demografi og publikasjonslistene fra Sosiodemografisk forskningsgruppe i Statistisk Sentralbyrå. Referansene herfra er så langt det har vært praktisk mulig tilpasset IUSSP's standard og klassifisert etter IUSSP's retningslinjer.

I henhold til avtalen for arbeidet, vil publikasjonen bli utgitt både av Statistisk Sentralbyrå og IUSSP.

Statistisk Sentralbyrå, Oslo, 28. februar 1984

Arne Øien

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BIBLIOGRAPHY OF POPULATION STUDIES IN NORWAY

INTRODUCTION

i) The history and development of census taking and the registration of vital events

The first comprehensive census in Norway was held in 1769¹⁾. Before this date several counts of selected population groups were taken usually for taxation or military purposes. These counts as a rule excluded children and women. The first nominative census dates back to 1801¹⁾. This census is commonly considered to be more reliable than the one from 1769. The census in 1865 was also nominative, while censuses taken in 1815, 1825, 1835, 1845 and 1855 were anonymous counts. From 1890 on nominative censuses were carried out decennially, with the exception of the year 1940. Due to World War II this census was postponed till 1946. The 1980 census is presumably the last census in the traditional sense. In the future census type of information will probably be extracted from statistical and administrative registers. In the 1980 census, information was drawn partly from the population registers and partly from returns to a postal questionnaire.

The earliest censuses gave specifications by age, marital status and occupational group. In the censuses of this century are added information on women being married at the date of the census, on the year of marriage and the number of children born to them. In addition these censuses contain particulars on housing conditions and economic activity. A new feature in the 1980 census was a detailed registration of job commuting.

Registration of births, deaths and marriages in Norway has been the responsibility of the clergy of the Church of Norway. Some parsons started to keep registers in the early seventeenth century and the registration was made mandatory by law of 1687. In the 1730s the bishops were instructed to collect population data for statistical purposes. Annual returns on births and deaths exist from as early as 1735, even earlier for some parts of the country.

In the period 1850 - 1873 the Norwegian pioneering demographer and sociologist Eilert Sundt conducted penetrating demographic studies based on new tabulations of available data as well as on data he collected himself. Sundt developed analytic methods and theories far ahead

1) The censuses of 1769 and 1801 were published by the Central Bureau of Statistics in 1980, NOS B 106 and NOS B 134.

of his time, not least in demographic dynamics.¹⁾

The demographic literature represented in the bibliography is mainly extracted from the catalogues of the library of the Central Bureau of Statistics. This library is considered the main source of literature and reports on demographic topics in Norway. A group of advisers have supervised the work and contributed to the initial selection. The advisers were chosen to represent different disciplines in the study of population.

Authors, who could be contacted, were asked to formulate the text on their own entries, according to the standards set for the publication, based on the agreement of the IUSSP Budapest meeting. Entries for authors who could not be contacted were formulated by the editor.

The chosen procedure, which was the only one possible with given resources, has led to considerable variation within the given framework, in regard to both form and extent of the information given for each entry.

In accordance with the Budapest agreement, the systematic classification in the bibliography follows the pattern of "Population Index", but the classification of individual entries was generally left to the authors, in the same way as the formulation of the texts.

The decision on inclusion or non-inclusion of particular publications is always a matter of judgement.

In general "litterature of importance for the scientific study of population" published in the period 1945 - 1977, and for the addendum 1978 - 1982, in Norway, by Norwegians or referring to Norwegian conditions should be included. Purely statistical as well as general newspaper articles were not to be included.

To our knowledge we have made no departure from the international recommendations with regard to selection, classification etc. applied in the bibliography. However, the decisions on inclusion or exclusion of marginal cases is a question of subjective judgement. The advisory group, and in some cases the authors themselves, have been helpful. Generally, the editor has made the final decision.

1) Martin S. Allwood (1957): Eilert Sundt, a pioneer in sociology and anthropology, Oslo. One of his works has been translated to English, "On marriage in Norway". Cambridge 1980.

In 1866 the routines for statistical reporting were changed. The earlier practice of collecting summary annual returns was now replaced by the method of extracting data from the parish registers. In October 1964 the Central Population Register was established. This register contains information on all vital events of the resident population.

The Central Bureau of Statistics receives information on deaths, births, marriages, divorces and migration from local population registers.

The Central Bureau of Statistics is also conducting nationwide sample surveys on various demographic topics. An example is the Norwegian Fertility Survey of 1977.

ii) The present organizational and institutional arrangements for the study and teaching of demography in Norway

There is no separate demographic institute in Norway. Teaching of demography takes place in several academic institutions, but only at the elementary level and generally as a sub-item on the curriculum of other disciplines taught at university level. Researchers who wish to pursue demographic studies on a higher level have to take up studies abroad. To improve recruitment of researchers and teachers in demography, the Norwegian Research Council for Science and the Humanities has granted some special scholarships for studies at foreign universities.

Demographic research takes place in a wide range of institutions, but normally as contributions to research projects with primarily non-demographic purposes.

The Central Bureau of Statistics has a long tradition in demographic analysis, and with its Sociodemographic Research Unit, established in 1968, it is the center of demographic research in the country. This unit is also responsible for the official Norwegian population projections.

The Norwegian Demographic Society is a forum for exchange of ideas and knowledge of demography in Norway. This society is part of the Scandinavian Demographic Society which was founded in 1968. The society regularly arranges symposia in demography, and courses in demographic methods, on a Nordic basis.

iii) The sources used in the compilation of the bibliography

The bibliography has been prepared in accordance with the general directions drawn up by the meeting arranged in Budapest in 1978 by the IUSSP. The following procedures were used:

iv) The existence of data banks or important unpublished statistical material

Primary statistical data on population are stored in files kept in the Central Bureau of Statistics. For the years prior to the establishment of the Norwegian Population Register these data are not easily accessible. But from 1967 on data are stored on magnetic tape, and for analytic purposes a special file has been constructed and is kept up-dated.

There also exists a number of unpublished tabulations, particularly those prepared on the basis of data from population censuses.

A data bank, containing linked, anonymized data from a 10 per cent sample of the population censuses 1960, 1970 and 1980 will be established, and will be available also at the Norwegian Social Science Data Services. (See below.)

The Norwegian Social Science Data Services (NSSDS) is located at the University of Bergen. Although its stock of stored data are large and diverse, its major activity has recently involved the computer mapping of small area ecological data including population data for municipalities and even smaller regions. NSSDS is also the center for the development of a joint time-series data base for the five Nordic countries. This data base will contain social, economic, and political variables including several distributions by sex, age and marital status as well as fertility, divorce, mortality, and migration rates. The European Political Data Newsletter is produced and distributed by the NSSDS and information about the newsletter may be obtained by writing to the archive at Hans Holmboesgt. 22, N-5000 Bergen.

The Medical Register of Births was established in 1967 and is located at the Institute of Hygiene and Social Medicine at the University of Bergen. This register provides information on length of gestation, mother's health during pregnancy, birth weight and congenital malformations, as well as complications during delivery.

Additional information may be obtained by contacting the Central Bureau of Statistics, Postboks 3131 Dep. OSLO 1, NORWAY.

A. GENERAL POPULATION STUDIES AND THEORIES:

A.1. General Population:A.1.1. General Population - Long Studies

BACKER, Julie E.

1

Ekteskap, fødsler og vandringer i Norge 1856-1960 (Marriages, births and migration in Norway 1856-1960). Samfunnsøkonomiske Studier, No. 13. Oslo, Statistisk Sentralbyrå, 1965. 221 pp. English titles and summary.

For marriages, presents time series of basic data, 1770-1960, and analyses of data, on nuptiality, including regional and international comparisons. For births, presents time series of basic data, 1736-1960, and analyses of data, 1865-1960, on fertility by marital status and various measures of reproduction, with urban-rural, regional, and international comparisons. For external migration, presents basic data, 1825-1960, and analyses of data, 1866-1960, on size and direction of flows, characteristics of migrants, and economic concomitants, with international comparisons. For internal migration, presents basic data, 1876-1960, and analyses of data from the Population Register Offices, 1951-1960. 120 tables. 34 diagrams.

IMHOF, Arthur E.

2

Aspekte der Bevölkerungsentwicklung in den nordischen Ländern 1720-1750 (Aspects of population development in the Scandinavian countries, 1720-1750). In 2 vols. Bern, Francke, 1976. 1 222 pp.

Contains chapters in the following subjects: Malthus and the Scandinavian countries; demographic-statistical materials; population development in Iceland; causes of death; countermeasures against epidemics, crop failures, and food shortages; climate; epizootiology; attitudes toward population in Sweden and Finland; and population and employment in the agrarian sector of Sweden and Finland. The study concludes with an extensive bibliography of sources, arranged by holding institution and author.

LUNDE, Anders S.

3

Norway: A population study. Ph.D. Dissertation. Ann Arbor, University Microfilms, 1955. Microfilm copy of typescript: viii, 531 pp.

A.1.2. General Population - Short Studies

DOUBLET, Jacques.

4

Problèmes démographiques en Norvège (Demographic problems in Norway). Population (Paris)1(4): 651-659. Oct.-Dec. 1946.

An analysis of the demographic situation in Norway, population increase with actual fertility decline, increasing proportion of older age groups, modification of these trends since 1932; governmental provisions for the care of mothers and children; the struggle against social diseases; family allowances; and the Government's awareness of demographic problems.

- DRAKE, Michael. 5
 Malthus on Norway. *Population Studies* (London) 20(2):175-196.
 Nov. 1966.
 Notes on Thomas R. Malthus's observations in Norway in 1799
 and comparison of his findings on the operation of negative and
 positive fertility checks with evidence from other sources.
 These include other observers' accounts, statistics from the
 censuses of 1769 and 1801 and parish registers 1735-1855, and
 sample surveys notably by Eilert Sundt in the 1850's and 1860's.
 Aspects considered include age at marriage, proportions married,
 marital fertility, premarital pregnancy, mortality, and family
 size by region and social group.
- DRAKE, Michael. 6
 Norway. In *European demography and economic growth*, edited by
 W.R.Lee, pp. 284-318. New York, St.Martin's Press, London,
 Croom Helm, 1979. ISBN 0-312-26935-8. LC 77-26118.
 This essay is concerned with the demographic development
 of Norway's economy from the mideighteenth century to the
 present day.
- DYRVIK, Ståle 7
 Den aktuelle befolknings-situasjonen (The current demographic
 situation). In *Norges befolkning*, edited by Ståle Dyrvik and
 C.J.O'Neill, pp. 35-56. Oslo, Cappelen, 1975. ISBN 82-02-03168-0.
 Norwegian demographic development 1960-1973, stressing the
 problems of a disturbed age structure and a rapidly changing
 marital pattern.
- DYRVIK, Ståle. 8
 Den befolkningshistoriske bakgrunnen (The population of Norway-
 historical background). In *Norges befolkning*, edited by Ståle
 Dyrvik and J.C.O'Neill, pp. 11-34. Oslo, Cappelen, 1975.
 ISBN 82-02-03168-0.
 The main features of Norwegian demography 1865-1960.
- GILLE, H. 9
 The demographic history of Northern European countries in the
 eighteenth century. *Population Studies* (London) 3(1):3-65.
 June, 1949.
 An analysis of demographic data for Sweden, Finland, Norway,
 Denmark and Iceland. An introduction is followed by a history
 of census and vital statistics in each country, and an analysis
 of the data on size of population, sex and age composition,
 nuptiality, fertility, mortality, population growth, trends in
 the eighteenth century, etc. Appendix II gives the absolute
 data from which the various rates used in the text were derived.
- HENRY, Louis. 10
 La population de la Norvege depuis deux siecles (Norway's pop-
 ulation during the two past centuries). *Population* (Paris)
 25(3):543-557. May-June, 1970. English and Spanish summaries,
 pp. 736, 739.
 An examination of data on demographic change from the eighteenth
 century to 1960, based on official statistics and other studies.
 Topics: sex ratio; the components of population change; nuptiali-
 ty; natality and fertility; legitimate fertility; family size;
 mortality; infant mortality.

NORGES ALMENVITENSKAPELIGE FORSKNINGSRÅD

11

Demografi i Norge. Status og perspektiver (Demography in Norway. Status and perspectives). Report from a committee on demography under the Norwegian Research Council for Science and Humanities. Oslo, 1977. 52 pp. ISBN 82-7216-014-5.

The report contains a discussion of the present state and future perspectives of the teaching and research of demography in Norway.

ØYEN, Ørjar.

12

Norges befolkning (The population of Norway). In *Det norske samfunn*, edited by Natalie R. Ramsøy, pp. 5-38. Oslo, Gyldendal Norsk Forlag, 1975. ISBN 82-05-06760-0.

The study gives a brief overview of the development and actual situation of the Norwegian population.

A.2. Population Theory

JOHANSEN, Leif.

13

Death rates, age distribution and average income in stationary populations. *Population Studies* (London) 11(1):64-77. July, 1957.

The paper analyses the influence of variations in death rates on average income in a population through the effects on age distribution. A stationary population is assumed so that there will be a correspondence between the profile of death rates and the age distribution. With a certain pattern of labour force participation according to age and sex there will be effects of changes in death rates on labour input in production. On the other hand there will also be effects on the population as measured in terms of consumption units. Formulas are derived for these two effects and for the net effect on average consumption, and numerical illustrations are given on basis of the pattern of changes in death rates in Norway in the first decades of this century.

VOGT, Johan.

14

Om relasjonene mellom giftermål og barnetall pr. giftermål i en stasjonær befolkning (The relation between marriage and the number of children per marriage in a stationary population). *Statsøkonomisk Tidsskrift* (Oslo) 70(2):101-114. June, 1956.

The necessary number of children per marriage. The annual number of marriages and the relative frequency of marriage in a stationary population. Relationships between the different measures of reproduction.

A.3. Interrelations with Other Disciplines

DYRVIK, Ståle.

15

Demografi og lokalhistorie (Demography and local history). In *Folket, bygda og historia*, edited by E. Hovland, pp. 18-26. Oslo, Universitetsforlaget, 1977. ISBN 82-00-01658-7.

Applications of demography in local history.

- HANSEN, Jens Chr; and KOSINSKI, Leszek A. 16
 Population Geography 1973. International Geographical Union.
 Commission on Population Geography, Bergen, 1973. 29 pp.
 A survey on the scope and status of population geography, based
 upon country reports from members of the IGU Commission on Populat-
 ion Geography.

A.4. Textbooks and Teaching Programs

- HOEM, Jan M. 17
 Grunnbegreper i formell befolkningslære (Basic concepts of formal demography). Oslo, Universitetsforlaget, 1970. 125 pp.
 "The text gives an introduction to the most common concepts of mortality and fertility analysis in probabilistic terms, and also a mathematically rigorous presentation of the basic aspects of stable population theory in discrete time." Chapters on: age structure and growth; measurement of mortality; measurement of fertility; reproduction rates (including discussion of apparent inconsistencies in the common interpretation of net and gross reproduction rates); special models of population (including description of six types and a section on deterministic and stochastic population growth); intensity of deaths; simple birth and death process.
- MYKLEBOST, Hallstein. 18
 Befolkning og bosetning (Population and settlement). In Norges geografi, edited by J.Gjessing, pp. 401-426. Oslo-Bergen-Tromsø, Universitetsforlaget, 1977.
 This is a text-book presentation of the population and settlement geography of Norway. The regional variations of fertility, mortality and migration is emphasized. The levelling-down of urban-rural contrasts, due to the more differentiated rural society and the increasing frequency of commuting from rural areas, is demonstrated.

B. REGIONAL POPULATION STUDIES

B.2. Regional Demography - Short Studies

HANSEN, Jens Chr.

19

Regional disparities in Norway with reference to marginality. Institute of British Geographers, Transactions (London) 57:15-30. 1972.

"Changes in the Norwegian occupational structure are described with special reference to the effects of these changes upon patterns of settlement and population trends in marginal areas ... Comparisons with Sweden and Finland are made partly to demonstrate characteristic features of the demographic structure of marginal areas, and partly to show that Norway in many respects represents a unique case. The absolute and relative importance of the marginal areas of the three countries is indicated, and regional policy in Norway is discussed in the light of the problems of its marginal areas."

HANSEN, Jens Chr.

20

Population trends and prospects in marginal areas of Norway. In People on the move. Studies on internal migration, edited by L.A. Kosiński and R. Mansell Prothero, pp. 255-275. London, Methuen, 1975. ISBN 0 416 78410 0 and ISBN 0 416 83000 5.

In studying the development of settlement in marginal areas, considerable attention must be given to changes in population, and the paper attempts to analyse the problems of marginality at different geographical levels, ranging from the census enumeration districts to the county. Data are provided on easily assessable demographic variables which describe economic processes and their spatial variation. Most of the examples in the paper are drawn from north Norway, and some comparisons are made with the marginal lands of Sweden and Finland.

C. SPATIAL DISTRIBUTION

C.1. General Spatial Distribution

- ASHEIM, Bjørn Terje. 21
 Regionale ulikheter i levekår (Regional differences in living-conditions). Oslo, Norges offentlige utredninger, NOU 1978:3, 1978. 150 pp. ISBN 82-00-70410-6.
 This is a social study of regional differences in living conditions. The author emphasizes more the importance of identifying problems than estimating in detail the dimension of various problems.
- BYFUGLIEN, Jan. 22
 Bosettingskart over Norge 1970. Grunnlag, innhold og bruk (Map of the population distribution of Norway 1970: basis, contents and use). Artikler, No. 65. Oslo, Statistisk Sentralbyrå, 1974. 43 pp. ISBN 82-537-0392-9. English summary.
 The article describes the production of the map of population distribution based on the population census 1970. Some methods of using the map are also mentioned.
- MYKLEBOST, Hallstein. 23
 Bosetningsutviklingen i Norge (Settlement changes in Norway). Plan og arbeid (Oslo) 1974 (4): 145-154.
 The paper discusses the processes of national, regional and local concentration of population. The lack of a village tradition may explain the particular Norwegian rise of small local centers, a supplementing of the central place network which, however, looks like nearing its completion. Three regional examples are used to demonstrate variations of the concentration processes in the 1950s and 1960s, how they have been modified by the greater mobility of people through commuting, and how the age and sex composition of the population has been influenced.
 The slowing down of the trend towards national concentration, pointed out in the 1968 paper, has become pronounced. This is interpreted as presenting an empirical basis for an active and realistic settlement policy, rejecting capitulation to the so-called "trend" as determinedly as it rejects the idea that it would be feasible or desirable to perpetuate the particular settlement pattern of today.
- MYKLEBOST, Hallstein. 24
 Bosetningsutviklingen i Norge 1950-1975 (Population and settlement change in Norway 1950-1975). Ad Novas. Norwegian geographical studies, No. 14. Oslo-Bergen-Tromsø, Universitetsforlaget, 1978. 155 pp. ISBN 82-00-01784-2.
 "Starting with an examination of the statistical basis for studies of population change in Norway, the development of urban places and rural areas, its causes and consequences are analyzed. The concentration process and its variations over time is described at national, regional and local level. Four selected regions are used for a more thorough study of population change and its inter-relation with industrial structure, age and sex composition, migration, commuting, accessibility etc."

C.2. Urban Spatial Distribution

- HELVIG, Magne; and HAGEBERG, Michael B. Editors. 25
 Søkelys på Bergen sentrum (Searchlight on the Bergen Centre).
 Bergen, Geografisk Institutt, Norges Handelshøyskole og Universitetet
 i Bergen, 1977. 275 pp.

The following chapters:

2. HELVIG, Magne.
 Boliger og befolkning i sentrum (Dwellings and population in the Bergen Centre). 19pp.
 The general trend of declining population and dwelling units is analyzed, using 1960, 1970 and 1975 census tract data. Possible underlying causes of the large areal variations in the decline are suggested and tested through multiple regression analysis.
5. HANSEN, Jens Chr.
 Befolkningsutviklingen innen Bergens-regionen (Population development in the Bergen region). 15pp.
 This study focusses upon changes in the internal distribution of people in the Bergen urban area between 1960 and 1975, and describes the consequences of this redistribution upon the age structure in different parts of Bergen.
12. HELVIG, Magne.
 Reisen til arbeidet i Bergen (Travel for work in Bergen). 21pp.
 The study is based on the 1970 Census of Population. After a description of development trends in the 1960's and a delimitation of Bergen's commuting region, a more detailed analysis is performed on the 1970 data, using a simple gravity model. Finally, the City Centre's situation in the total picture is dealt with, using special materials from 1966 and 1973 collected through questionnaire surveys.
16. HANSEN, Jens Chr.
 Bergens befolkning i nasjonalt og regionalt perspektiv (The population of Bergen in a national and regional perspective). 7pp.
 The paper compares Bergen's growth with that of other main cities of Norway, and discusses possible future population trends.
17. HELVIG, Magne and STENSTADVOLD, Kjell.
 Vekstrammer for befolkning og næringsliv (Growth limits for population and industries). 14pp.
 Based on development trends 1960-75 and the Central Bureau of Statistics' population prognosis for Bergen two alternatives for the population in 1985 are suggested, both leading to a continued reduction in the central city and a decreasing growth rate in the suburban areas of the city.

HELVIG, Magne

26

Den indre differensiering i Bergen sentrum og konsekvenser for bo-settingen (The inner differentiation in the Bergen City Centre and its consequences for the residential areas). Norsk Geografisk Tidsskrift (Oslo) 30 (3): 139-156. 1976.

The general problems of commercial expansion in the urban centre and pressure upon the residential areas are studied. After a general presentation of the Bergen Centre and a descriptive analysis of it, in which an attempt is made to isolate meaningful variables that can explain the heavy population decline and the great areal variation in the annual rate of decrease, a multiple regression analysis is performed. A regression model containing only four of the tested variables "explains" some 80 per cent of the variation in population change. These variables are: 1. Change in the number of dwelling units 1960-70. 2. Housing standard (sewer connection/separate kitchen). 3. Nearness to main traffic arteries (environmental quality variable). 4. Distance from the Peak Value Intersection in the Hard Core (reflecting the commercial pressure on the residential areas). In the conclusion it is demonstrated (by putting "improved" values into the model) that considerable improvements in the interior and exterior environment as well as a substantial increase in the number of dwellings will be needed to check, if not to change radically, the ongoing process of deterioration and population in the Bergen City Centre.

MYKLEBOST, Hallstein.

27

Norges tettbygde steder, 1875-1950 (Densely settled districts of Norway, 1875-1950). Det Norske Geografiske Selskab, Skrifter, Ad Novas, No. 4. Oslo, Universitetsforlaget, 1960. 371 pp. English summary.

The study gives a quantitative overview of the development of urban population in Norway, as well as of individual urban settlement. Due to inconsistencies in the official census data, such information has been erratic. The rate of urban growth has varied with economic conditions and innovations in transportation, manufacturing etc. Urban settlements are classified according to main economic activity and size, and comparisons are made between the different groups.

Table appendices give population figures, partly revised, for individual settlements at each census 1875-1950 and percentages of the economically active population employed in each of nine separate industries 1950.

MYKLEBOST, Hallstein.

28

Urbanization and regional concentration in Norway in the 1950s and 1960s. Norsk Geografisk Tidsskrift (Oslo) 22(4): 227-224. 1968.

In the 1950s there was a strong increase in urban population and a notable decrease in rural population. In rural areas the relative increase in the number employed in service industries was not materially different from that of urban settlements, partly because of more employment in the countryside, partly because rural-urban commuting became more widespread. Information on commuting is used to delimitate commuting regions with an occupational distribution not radically different from that of the urban population. The contrast between this shortdistance commuting and the typical long-distance commuter, middle-age men having had to seek work in the

city because retionalization of agriculture and forestry have made him superfluous in the local economy is demonstrated. Short-distance commuting is conceived as implying a high degree of integration in the urban community, long-distance commuting as a transitory phenomenon.

The major commuting regions are called "urban regions". As these are aggregates of administrative units, available statistical information makes it possible to trace their population growth from year to year. These regions' proportion of the national population increase continued augmenting until the mid-sixties, but the years 1966-67 showed a marked decline in concentration, a fact used to underline that the direction and inevitability of "trends" may be less obvious than generally assumed.

RASMUSSEN, Tor Fr.

29

Byregioner i Norge (City regions in Norway). Rapport, Oslo, Norsk institutt for by- og regionforskning, 1969. 192 pp.

An analysis of the process of concentration of the population to city regions with more than 10 000 inhabitants 1900-1970.

City regions are defined as commuting regions.

C.3. Rural Spatial Distribution

BROX, Ottar; LARSEN, Helge O; and PEDERSEN, Hans.

30

Befolkningsutviklinga i spredtbygde områder i Nord-Norge (Demographic development in the sparsely populated areas of North Norway). Tidsskrift for Samfunnsforskning (Oslo) 21 (3-4): 245-254. Aug. 1980. English summary.

The article deals with the problem of whether the processes of depopulation and concentration, that were going on in North-Norway during the 50'ies and the 60'ies, have culminated.

Official statistics show that rural municipalities (kommuner) with a long history of depopulation now maintain their population better. Former fast-growing centra now grow much slower. But it is necessary to find out whether this trend can be observed on the lowest statistical level, as the settlement pattern hardly can be perceived as consolidated without new recruitment to the periphery.

Primary statistical areas (kretser) of Troms province have been grouped into three categories: Centers, commuting areas and sparsely populated areas. Growth now takes place primarily in the second category, whereas the decline of the third has been reduced from 1,3% p.a. to 0,3% in the 70'ies.

Some problems involved in tying the consolidation hypothesis to the development of gross population figures are discussed. There are some reasons to assume that this indicator underestimates the strength of the turnaround trend.

HANSEN, Jens Chr.

31

Mountain communities in Norway. Norsk Geografisk Tidsskrift (Oslo) 30 (4): 211-220. 1976.

"Previous studies of mountain communities in Norway have usually been in the form of local monographs; general studies are few. This is partly due to data problems. Existing classifications of mountain regions are evaluated and compared. With the aid of data

from recent population and agricultural censuses, the classifications are tested and recent development trends are described. Very important local variations within the mountain region are identified".

LUNDEN, Kåre.

32

Om gardtal og folketal i Noreg ca. 1340 og ca. 1665 (On the number of farms and people in Norway ca. 1340 and ca. 1665). Historisk Tidsskrift (Oslo) 48 (2): 89-113. 1969. English summary.

The paper discusses the results of Jørn Sandnes' study of the number of farms and people in Norway ca. 1340. Historisk Tidsskrift 47(4): 261-292. 1968.

The article will show:

1. The medieval sources give such uneven information that very extensive corrections are necessary if the results of an examination is to be compared by district, and by the population in the 1660s.
2. A basis for such correction can, with conventional historical methods, only be achieved by taking fully into account the sources from the 16th and 17th centuries.

LUNDEN, Kåre.

33

Gardar, bruk og menneske i høgmellomalderen. Kva for tal peikar punktgranskingane til Øydegardsprosjektet mot? (Farms, holdings and people in the High Middle Ages. What are the numbers indicated by the Nordic project for the study of deserted farms and villages during the late Middle Ages?). Historisk Tidsskrift (Oslo) 58(2): 111-158. 1979. Summary in English.

"The article gives an account of sixteen local investigations of Norwegian medieval settlement carried out as a part of the Nordic project for the study of deserted farms and villages during the late Middle Ages." ...

"The main results are the following: The sixteen local investigations ... indicate that the national figures for the year 1300 included about 500 000 people." ...

"The figures estimated for the period about 1300 AD are somewhat higher than corresponding figures for about 1665, when the number of peasant holdings was about 57 000 and the population approximately 440 000."

WENNEVOLD, Steinar.

34

Bosettingsendringer i Sunndal og Surnadal 1946-1970 (Settlement changes in Sunndal and Surnadal 1946-1970). Geografiske studier av utkantstrøk i Norge. Arbeidsrapport, No. 5. Bergen, Geografisk institutt, 1974. 125 pp.

"This regional monograph gives a detailed mapping of settlement changes in two adjacent communes in the period 1946-1970 and analyses factors explaining the changes. During the period Surnadal had a stationary population, while Sunndal more than doubled its total population. Both of the communes experienced a marked population growth in their central parts and a marked decline in marginal areas.

In the analysis data at three levels of aggregation are put to test. The lowest level is cadastral farms, while the smallest

census units make a middle level and data concerning the total communes are used as the highest level.

At the lowest level the analysis shows a distinctive negative correlation between distance from centre and population change in both of the communes.

The analysis also shows that the available set of census data can explain important aspects of local settlement changes, the most relevant variables being development of the sectors of the economy and the demographic structure.

A cohort analysis demonstrates that the demographic future of the two communes is uncertain because cohorts aged 15-29 are declining due to outmigration."

D. TRENDS IN POPULATION SIZE

D.1. Past Trends

DRAKE, Michale. 35

The growth of population in Norway 1735-1855. *Scandinavian Economic History Review* (Copenhagen) 13(2):97-142. 1965.

Presents and discusses statistics from parish registers on annual births, deaths, and marriages for each of four dioceses, assembled from archival sources. Computation of annual mid-year populations and of birth, death, and marriage rates. Examination of national trends in relation to other European experience. Survey of literature on growth processes and citation of evidence for attributing decline in Norwegian death rates after 1815 to widespread vaccination and the cultivation of potatoes. Statistical appendix with critical notes on sources.

DRAKE, Michael. 36

Population and society in Norway 1735-1865. In series: *Cambridge Studies in Economic History*. Cambridge, Cambridge University Press, 1969. xx, 256 pp. ISBN 521-07319-7.

"The concern of this present study is with ... questions (about vital rates in preindustrial Western Europe). Norway has been chosen as the field of operations, because within this context it offers three major attractions to the demographic historian": a large body of population statistics on the pre-industrial period 1735-1865; useful unpublished materials, including "the exceptionally detailed returns of the 1801 census which enable us to compare age and social structure as well as nuptiality, fertility and marital age patterns in various parts of Norway"; and studies of contemporary and historical Norwegian society by Eilert Sundt, nineteenth-century Norwegian sociologist. Chapters 1 and 2 analyze statistical and literary sources, and outline broad demographic trends. Chapters 3-6 "attempt to show the interplay of marriage, economic circumstances, social custom and fertility in the century before Norway's industrial revolution." Chapter 4 focuses on "regional differences in nuptiality and fertility in eighteenth and nineteenth-century Norway ... (and) often-assumed links between supposed employment opportunities and fertility, and between the age at marriage of men and women"; Chapter 5, The social structure of fertility, examines family and household structure in three small areas of Norway at the beginning of the nineteenth century. Appendixes contain detailed source material from which text tables were derived, examples of questionnaires completed by parish priests, a bibliography (pp. 233-244), and an index.

LUNDEN, Kåre. 37

Folketallet og bosetningen (Population and settlement).

In *Norges historie* 3. Norge under Sverreætten 1177-1319, pp. 256-267. Oslo, J.W. Cappelens Forlag A.S., 1975. ISBN 82-02-03425-6.

The population of Norway ca AD 1300 is calculated, based on existing local studies. The number arrived at is ca. 460 000, within present boundaries.

D.2. Current Rates and Estimates

- DYRVIK, Ståle. 38
 Utviklingstendensar i 1975 i Norges befolkning (Trends in the Norwegian population in 1975). Artikler, No. 90. Oslo, Statistisk Sentralbyrå, 1976. 27 pp. ISBN 82-537-0654-5. English summary.
 A presentation of the demographic situation in Norway in 1975, emphasizing the decline in fertility and nuptiality.
- DYRVIK, Ståle. 39
 Utviklingstendensar i 1976 i Norges befolkning (Trends in the Norwegian population in 1976). Artikler, No. 106. Oslo, Statistisk Sentralbyrå, 1978. 37 pp. ISBN 82-537-0820-3. English summary.
 A presentation of the demographic situation in Norway in 1976, emphasizing the decline in fertility and nuptiality.
- STATISTISK SENTRALBYRÅ. 40
 Folkemengdens bevegelse. Oversikt 1966-1970 (Vital statistics and migration statistics. Survey 1966-1970). Statistiske Analyser, No. 1. Oslo, 1972. 83 pp. ISBN 82-537-0176-4. English summary and table titles.
 The survey deals with the components influencing the population structure and population movement, and data from the annual statistics are used as basis for the tables. The main weight has been laid on the development during 1966-1970 compared to previous years. Findings from the life table calculations for 1966-1970 are also included.
- STATISTISK SENTRALBYRÅ 41
 Folkemengdens bevegelse. Oversikt 1971-1975 (Vital statistics and migration statistics. Survey 1971-1975). Statistisk Analyser, No 36. Oslo, 1978. 129 pp. ISBN 82-537-0835-1. English summary and table titles.
 The publication gives a survey of the trend of components influencing the size, structure and development of the Norwegian population, with particular weight on the trends in 1971-1975 compared with the pervious five-year period. The tables given are supplementary to tables in yearly publications on vital and migration statistics, as additional distributions and special statistical measures are given.
 This publication also includes life tables for the period 1971-1975 and results form further calculations based on period data for births, marriages, divorces and internal migration. References are given to separate publications in which analyses based on data for years within the period 1971-1975 are presented.
 To the extent other and more appropriate statistical measures have not been introduced, this publication gives data corresponding to those in previous surveys: SØS no. 10 and 13 covering marriages, births and deaths in 1956-1960, NOS Vital Statistics and Migration Statistics 1965, and SA no. 1 Vital Statistics and Migration Statistics Survey 1966-1970.

D.3. Projections and Predictions

- BACKER, Julie E. 42
 Prognose for befolkningsutviklingen 1945-1975 (Forecast for population development, 1945-1975). Statistiske Meddelelser (Oslo)64(10-12): 300-311. 1946.

- BACKER, Julie E. 43
 Prognose for befolkningsutviklingen fram til utgangen av 1970
 (Projections of population to 1970). Statistiske Meldinger (Oslo)
 72(5): 149-158. May, 1954.
- BRUNBORG, Helge 44
 Statistisk Sentralbyrås befolkningsprognose modell. VIII. Framskrivinga
 1971-2000. Bakgrunnsmateriale og kommentarer til resultatene (Populat-
 ion projection model of the Central Bureau of Statistics. VIII. The
 projection of 1971-2000. Data basis and comments). Arbeidsnotater, IO
 73/14. Oslo, Statistisk Sentralbyrå, May 7, 1973. 76 pp.
- BRUNBORG, Helge 45
 Statistisk Sentralbyrås befolkningsprognose modell. IX. Framskrivinga
 1971-2000. Teknisk dokumentasjon (Population projection model of
 the Central Bureau of Statistics. IX. The projection of 1971-2000.
 Technical documentation). Arbeidsnotater, IO 73/15. Oslo, Statistisk
 Sentralbyrå, May 7, 1973. 61 pp.
- BRUNBORG, Helge 46
 Framskriving av folkemengden i Norge 1973-2100: et analytisk
 eksperiment (Population projections for Norway, 1973-2100: an
 analytic experiment). Artikler, No. 69. Oslo, Statistisk
 Sentralbyrå, 1974. 100 pp. ISBN 82-537-0413-5. English title,
 preface, table of contents, index of tables and diagrams, and
 summary.
- BØHN, Arild 47
 Norges fremtidige befolkningsutvikling. Oppstilling og vurdering
 av foreliggende befolkningsprognoser (The future population
 development of Norway. Content and evaluation of existing pop-
 ulation forecasts). Rapport. Oslo, Transportøkonomisk Institutt,
 March, 1970. 31 pp.
- GILJE, Eivind. 48
 Befolkningsprognoser. En undersøkelse av de virkninger feil i for-
 utsetningene har for resultatene (Population projections. An
 investigation of the effects on the results of wrong assumptions).
 Arbeidsnotater, IB 66/3. Oslo, Statistisk Sentralbyrå, 1965. 30 pp.
 Describes a number of simulations using a simple one-region
 component projection model (cohort-survival). The effects, on the
 total population and sub-groups of this after 5, 10, 15 and 20
 years, of adding "errors" to the base assumptions for each of the
 three components, mortality, fertility and migration, are studied.
- HANSEN, Jens Chr. 49
 Une critique géographique des perspectives d'évolution de la
 population norvégienne (A geographical discussion of recent
 Norwegian population projections). In *Géographie et perspectives*
 à long terme, edited by M. Philipponneau and S. Philipponneau,
 pp. 385-411. IGU (International Geographical Union) Commission
 on Applied Geography, 4th Symposium, Rennes, 1971. Sablé, Editions
 Coconnier, 1973.
 "The most recent projections cover the period 1969-1990, and
 give data for each of the 451 communes. The results are analysed,
 partly by comparing the projection data with observed population

changes 1965-1969. The most important problems discussed are: the choice of size of primary statistical areas and the methods of grouping communes in functional regions before estimating regional migration coefficients.... In conclusion, planning policy consequences and their weaknesses are discussed."

HANSEN, Jens Chr.

50

En geografisk kritikk av de norske befolkningsprognoser (A geographical discussion of recent Norwegian population projections). Norsk Geografisk Tidsskrift (Oslo) 25 (3-4): 175-188. 1971.

"The most recent projections cover the period 1969-1990, and give data for each of the 451 communes. The results are analysed, partly by comparing the projection data with observed population changes 1965-1969. The most important problems discussed are the choice of size of primary statistical areas and the methods of grouping communes in functional regions before estimating regional migration coefficients. The main weakness of the projection model is its systematic under-estimation of out-migration from marginal areas and of in-migration to fast-growing urban areas. In conclusion, the effects of these weaknesses on planning policy are discussed."

HOEM, Jan M; and RIDENG, Arne.

51

Kommentarer til Statistisk Sentralbyrås framskrivning av folkemengden i kommunene 1972-2000 (Comments to the Regional Population Projections of Norway). Artikler, No. 52. Oslo, Statistisk Sentralbyrå, 1972. 29 pp. ISBN 82-537-0210-8.

English title, contents, preface, and graph and table titles.

"The Central Bureau of Statistics of Norway has published new projections of the population in the 444 Norwegian Municipalities in Population Projections 1972-2000. Regional Figures, (NOS A 523) The description given there of the data base and assumptions of the projections is rather brief. In the present Article, some further comments are presented. A more detailed discussion of the migration data used will appear later"

Tables: Total fertility rate per woman, registered, 1964-1971, and according to various projections, 1971-2000; Population at the end of the year, registered, 1964-1971, and according to the latest projections, 1972-2000; Number of births and crude birth rate, 1972-2000; Number of deaths and crude death rate, 1972-2000.

HOEM, Jan M.

52

Usikkerhet ved befolkningsprognoser (Inaccuracy of population projections). Artikler, No. 54. Oslo, Statistisk Sentralbyrå, 1973. 63 pp. ISBN 82-537-0219-1.

Contents: Introduction; The evaluation of forecasting methods; Projection vs. prediction; Short and long term forecasting; Linear models for population forecasting; Sources of forecasting inaccuracy; Estimation and registration errors; Pure randomness; Random vital rates; Erroneous trend in mean vital rates; A further discussion of the probability distribution of the population vector; The presentation of population forecasts; Plans for further work on Norwegian population forecasts.

- HOEM, Jan M. 53
 Levels of Error in Population Forecasts. Artikler, No. 61.
 Oslo, Statistisk Sentralbyrå, 1973. 46 pp. ISBN 82-537-0317-1.
- RIDENG, Arne; and TØNNESEN, Bjørn L. 54
 Statistisk Sentralbyrås regionale befolkningsframskrivinger:
 nåværende opplegg og utviklingsplaner 1974 (The regional popu-
 lation projections of the Central Bureau of Statistics of Norway:
 current procedure and plans for the future 1974). Artikler,
 No. 62. Oslo, Statistisk Sentralbyrå, 1974. 25 pp. English
 title, contents, preface, and graph and diagram titles.
 Contains brief descriptions of the model and assumptions used
 to make national projections and regional projections down to
 the municipal (kommune) level. Also included are short-term
 (five-year), and long-term plans for improving the model.
- SCHWEDER, Tore. 55
 The precision of population projections studied by multiple
 prediction methods. Demography (Washington) 8 (4): 441-450.
 1971.
 Assuming known and constant age specific mortality and fer-
 tility, the covariance matrix of the population vector is cal-
 culated using a multitype branching process model. A family of
 prediction intervals for all the linear functions of the
 population vector, with given simultaneous prediction coefficient
 is then obtained. It is found that from a population projection
 point of view this model allows for all too little variation i.e.
 "The source of projection derivation must rest mainly on year-
 to-year variation in death probabilities and birth distributions,
 and in errors made in estimating these quantities. The pure
 randomness of population dynamics is of minor importance."
- SCHWEDER, Tore; and Hoem, Jan. 56
 The unreliability of population forecasts; numerical illustrations
 based on Norwegian data. Arbeidsnotater, IO 72/1. Oslo, Statistisk
 Sentralbyrå, 1972. 16 pp.
 The covariance matrix of the population vector is estimated
 in a pure stochastic matrix model. It is found that the
 assumption of independent birth rates from year to year does
 enlarge the fluctuations in the birth rates (which certainly are
 positively correlated from year to year) and implies an overesti-
 mate of the variability in the number of births. The pure
 stochastic matrix model, and consequently the branching
 process in a random (independent from year to year) environment,
 is found unsuitable for human population dynamics and does not
 give rise to very valuable estimates of the uncertainty of
 population projections.
- SØRENSEN, Knut Ø. 57
 Statistisk Sentralbyrås befolkningsprognosemodell ved de regionale
 framskrivinger, 1975 (The population projection model of the
 Central Bureau of Statistics of Norway in the regional pro-
 jections, 1975). Artikler, No. 80. Oslo, Statistisk Sentral-
 byrå, 1975. 48 pp. English title, preface, and table of con-
 tents. ISBN 82-537-0540-9.
 The purpose of this article is to supply a detailed description

of the projection method used in a new regional population projection that was made by the Central Bureau of Statistics in 1975. The first major section of the article is on the projection model as applied to the principal projection areas, and includes the following subsections: a survey of the model and assumptions, details of the projection model, estimation of the parameters of the model, and aggregation of results. The next section is on apportioning the projected population of the principal projection areas among municipalities. The following addenda are also included: lists of published and unpublished tables, a list of principal projection areas, and a list of principal projection areas grouped together in the calculation of fertility rates.

ØSTBY, Lars.

58

Noen norske befolkningsprognoser. En sammenlikning og vurdering (Some Norwegian population projections. A comparison and evaluation). Geografen (Oslo) 4 (1): 49-56. 1970.

D.4. Population Size and Growth

BACKER, Julie E.

59

Befolkningsutviklingen i Norge i 1946-1950 (The demographic situation in Norway, 1946-1950). Statistiske Meldinger (Oslo) 69 (6): 185-192. 1951.

HANSEN, Jens Chr.

60

Befolkningsutviklingen i Norge 1950-2000: et kompendium: 1. Almen oversikt og regionale analyse (Population growth in Norway, 1950-2000. Part 1: general review and regional analysis). Bergen, Universitetet i Bergen, Norges Handelshøyskole, Geografisk Institutt, 1977. vi, 140 pp. LC 78-349745.

This is the first volume of a two-part manual. Chapter 2 is concerned with basic population trends at the national level. Chapter 3 concentrates on regional population changes.

MATTHIESSEN, P.C.

61

Befolkningsstabilisering i Norge (Population stabilization in Norway). In Norges befolkning, edited by Ståle Dyrvik og C.J. O'Neill, pp. 101-112. Oslo, J.W. Cappelen's Forlag A/S, 1975. ISBN 82-02-03168-0.

"To investigate the numerical implications of different ways of halting the growth of population in Norway: Firstly, the number of births per female is calculated (1972-2067) if one wishes an immediate stop to population growth. Here we observe a very substantial fluctuation in the level of fertility. Secondly, the growth of population is considered if every generation of females after 1972 simply replaces itself. With such an assumption, it will take about 70 years before population stabilization is attained."

O'NEILL, C.J.

62

Aspects of Norway's demographic development in the 1960s.
European Demographic Information Bulletin (The Hague) 4(2): 69-78.
1973.

"...some quite significant developments are occurring in Norwegian demographic behaviour... This brief paper seeks to delineate some of the subtle changes which underlie the population movements of the last decade."

E. MORTALITY

E.1. General Mortality

BACKER, Julie E.

63

Dødeligheten og dens årsaker i Norge 1856-1955. (Trend of mortality and causes of death in Norway, 1856-1955). Samfunnsøkonomiske Studier, No.10. Oslo, Statistisk Sentralbyrå, 1961. 246 pp. English titles and summary.

"The present study ... combines data taken from more than 200 volumes of Norway's Official Statistics and previously unpublished statistical information"...

Chapters: Population development in Norway; Basic data of the mortality statistics in Norway General trends of mortality 1736-1955; Infant mortality 0-1 year; Mortality of children 1-4 years; Mortality of children in school age, 5-14 years; Mortality of young adults 15-39 years; Mortality of midlife and old age; Mortality by marital status, 1875-1950; Regional variations of mortality; Mortality in Norway as compared with other countries; Trends of mortality 1856-1955 and the expectation of life. 160 tables. 54 diagrams.

FORSDAHL, Anders.

64

Momenter til belysningen av den høye dødeligheten i Finnmark fylke. Kan den høye dødeligheten i dag være en senfølge av meget dårlige levevilkår i barne- og ungdomsalderen? (Some explanations of the high mortality in Finnmark country. May the high mortality to-day be lagged effect of poor living conditions in childhood and youth).

Tidsskrift for den Norske Lægeforening (Oslo) 93(10): 661-667.1973.

ORE, Tønnes K.

65

Dødeligheten i Norge siden 1930 med særlig sikte på utviklingen de siste år (The mortality in Norway since 1930 with special emphasis on the latest years). Den 11. Nordiske Livsforsikringskongress, Oslo, 1952, Vol. I. Pp.142-164.

Illustrates changes in the mortality in the Norwegian population as well as among life insured men and women over a twenty years period 1930-1950.

ORE, Tønnes K.

66

The trend of mortality in Norway. Comptes Rendus du XVIe Congrès International D'Actuaires, Brüssel, 1960, Vol II. Pp. 609-627. Summaries in English, German, Spanish, French and Italian.

"Illustrates the trend of mortality in the Norwegian population in the period 1931-1957, with comparisons between men and women, and between the mortality in various countries. Mortality among insured people is compared with the population mortality".

- ORE, Tønnes K. 67
 Udviklingen af dødeligheten og prognosen for den fremtidige dødelighed (The trend of mortality and the prognosis of the mortality in the future).
 Den 14. Nordiske Livsforsikringskongress, Copenhagen, 1964.
 Pp. 39-77.
 Illustrates the trend of mortality in Norway 1941-1960 at the various ages. The changes in the main causes of death are shown. Most likely such prognoses should be based on the outlook for the various causes of death. The mortality among insured persons is illustrated, and the need of adjusted mortality tables in the life insurance business is discussed.
- STATISTISK SENTRALBYRÅ 68
 Dødelighetsutvikling og dødsårsaksmønster 1951-1970 (Mortality trend and mortality patterns 1951-1970). Statistiske Analyser, No. 9. Oslo, 1974. 208 pp. ISBN 82-537-0377-5. English summary.
 Contains a total survey of the mortality trend and the changes in the cause of death pattern from 1951 to 1970.
- E.2. Prenatal and Perinatal Mortality
- BACKER, Julie E. 69
 Den perinatale dødelighet i forhold til fødselsvekt og svangerskapets antatte varighet (Perinatal mortality in relation to duration of pregnancy and weight of infant at birth). Tidsskrift for den Norske Lægeforening (Oslo) 88(22):2106-2111. Nov.15, 1968.
- BLIX, Ellen. 70
 Perinatale dødsfall i Norge i 1969 (Perinatal mortality in Norway 1969). Arbeidsnotater, IO 71/10. Oslo, Statistisk Sentralbyrå, 1971. 38 pp.
 Medical registration of births was introduced in 1967, replacing the former notifications from the midwives. In 1969 ICD, 8 rev. was introduced, and from this year the official statistics on perinatal mortality are compiled from the joint information on the civil and medical birth and death certificates. The present paper may be considered as a pilot study regarding the causes of death as well as the available socio-demographic factors, presumably influencing the perinatal rates.
- E.3. Infant and Childhood Mortality
- BACKER, Julie E. 71
 Regionale variasjoner i spedbarnsdødeligheten i 1961-1964 (Regional difference in infant mortality, 1961-1964). Tidsskrift for den Norske Lægeforening (Oslo) 87:1064-1067. June 1, 1967.
- BACKER, Julie E. 72
 Trend of perinatal and infant mortality in Norway since the Second World War. International Population Conference 1969, Liège, The International Union for the Scientific Study of population, Vol.2:1024-1031. 1971.

- BACKER, Julie E.; and AAGENÆS, Øystein. 73
 Dødelighet blant spedbarn i Norge, 1901-1963 (Infant mortality in Norway, 1901-1963). Samfunnsøkonomiske Studier, No. 17. Oslo, Statistisk Sentralbyrå, 1966. 74 pp. English titles and summary.
 "The statistical material used for this study is drawn from the official reports on mortality statistics of Norway".
 Chapters: Socio-economic and metal background of the development of infant mortality: Trend of maternal mortality; Trend of infant mortality. (The statistical material and definition of rates; Total infant loss; Infant mortality by age during the first year; Infant mortality by sex and age during the first year; Mortality by legitimate and illegitimate infants; Influence of maternal age and parity on vitality of child; Seasonal trend of infant mortality; Trend of infant mortality in rural districts and towns and in the various counties); Causes of infants' deaths (The statistical material; Mortality of main diseases and morbid conditions).
- BACKER, Julie E.; and AAGENÆS, Øystein. 74
 Infant mortality problems in Norway. Vital and Health Statistics, Series 3, Analytical Studies, No. 8. Washington D.C., U.S. National Center for Health Statistics. Oct., 1967. 40 pp. LC. 67-61848.
 "In this report detailed statistics are provided on changes in infant and perinatal mortality rates in Norway since 1900. The analysis focuses on the sizable decreases in the late neonatal (7-27 days) and postneonatal (28 days - 11 months) mortality rates, and the considerable smaller decrease in the perinatal (stillbirths and under 7 days) mortality rate. Changes in parameters of infant loss and their influence on the infant and perinatal mortality trends are discussed. Mortality among high-risk infants is analysed. The population trend, socio-economic situation, provisions for maternal and child welfare, medical care of infants, and vital statistics system are described in detail." Appendixes: Legal provisions for family welfare; System of birth and death registration.
- BOLANDER, Anne-Marie; and LETTENSTRØM, Gerd S. 75
 Comparative study of prenatal, infant and childhood mortality in four nordic countries.
 International Population Conference, Liège. Vol. 3. 1973. Pp. 143-156.
- JONASSEN, Øyvind 76
 Dødfødsler og dødsfall i 1. leveår og det lys de kaster over de sosiale forhold. En undersøkelse fra Finnmark (Stillbirth rate and mortality in the 1st year of life and the light they throw on social conditions. An investigation from Finnmark). Tidsskrift for den Norske Lægeforening (Oslo) 84: 1396-1404. Oct. 15, 1964.
- LARSEN, Øivind 77
 Farlig å være barn? Barneår og livssjanser (A dangerous childhood?) Forskningsnytt (Oslo) 24 (4): 14-19. 1979.
 Based on morbidity and mortality statistics and on medical and social history, the author describes some of the important changes in the health hazards of childhood during the last century.

STATISTISK SENTRALBYRÅ

78

Dødelighet omkring fødselen og i første leveår 1969-1972 (Fetal and infant mortality 1969-1972). Statistiske Analyser, No. 15. Oslo, 1975. 10 pp. ISBN 82-537-0460-7. English summary.

The publication is compiled with the previously published "Perinatal mortality in Norway 1969" as pattern (ANO 10 71/10). As the perinatal deaths, i.e. late fetal deaths and deaths during the first week of life accounted for more than 80 per cent of all fetal and infant deaths up to 1 year, the chief concern has been to deal with the variations in perinatal mortality in relation to the medical and sociodemographic factors of importance.

Data compiled from the joint information on the civil and medical birth and death certificates.

SUNDAL, Alfred.

79

Spedbarnsdødeligheten i Norge; en sammenligning mellom spebarnsdødelighet, perinatal mortalitet, neomortalitet og sendødelighet i Norge og i en del andre land med lav spedbarnsdødelighet (Infant mortality in Norway; a comparison of infant, perinatal, and neonatal mortality and mortality of late infancy in Norway and in other countries with low infant mortality). Tidsskrift for den Norske Lægeforening (Oslo) 77 (12): 508-510. June 15, 1957.

SUNDAL, Alfred.

80

Dødfødsel, levende fødte og døde i første år i et fylke med lav spedbarnsdødelighet. En detaljundersøkelse fra Bergen i 1955 og 1962 (Stillbirths, live births and deaths in the 1st year in a county with low infant mortality. A special investigation at Bergen in 1955 and 1962). Tidsskrift for den Norske Lægeforening (Oslo) 84 (20): 1405-1411. Oct. 15, 1964.

E.6. Differential Mortality

BLIX, Ellen.

81

Dødelighet og ekteskapeleg status i Norge 1969-1970 (Mortality and marital status in Norway 1969-1970). Arbeidsnotater, IO 74/45. Oslo, Statistisk Sentralbyrå, 1974. 23 pp.

Violent and unnatural deaths are regularly tabulated by sex, age and marital status of the deceased. Suicides among unmarried, married and previously married have been analysed for a series of 10-year periods. Official statistics of mortality from diseases and marital status have not been compiled. The present paper gives a survey of the variations in the mortality level expressed as rates for unmarried, married, widow(er)s and divorced in relation to all deaths (100), and also for unmarried and previously married in relation to married. Rates have been calculated for different categories of cardiovascular diseases, different sites of malignant neoplasms for respiratory diseases, accidents and suicides. More than 80 pst. of all deaths are assigned to these groups.

The material is the official cause of death statistics and the information on marital status is derived from the Central population Register.

EITINGER, Leo

82

Mortality and morbidity after excessive stress. A follow-up investigation of Norwegian concentration camp survivors. Oslo, Universitetsforlaget, 1973. 153 pp. ISBN 83-00-4738-5. New York, Humanities Press, ISBN 391-00289-9.

"During World War II about 30.000 people were arrested in Norway. 6.193 were deported to concentration camps in Germany. Out of them were 762 Jewish prisoners, 739 of them died. The mortality among the non-Jewish prisoners varied from 44,9% in extermination camps to 7,9% in the "normal" camps. After the liberation the mortality of the ex-prisoners compared with the mortality of the Norwegian population was much higher for the total observation period (-31.12.66). The morbidity study was carried out on a random sample of 500 people compared with a matched control. The ex-prisoners lead less stable working lives, they had more sick periods, longer sick leaves and more frequent and long-lasting hospitalization periods than the controls. The higher morbidity was not connected with any particular diagnosis. The ex-prisoners from the lower social-economic classes seemed less able to compensate for their failing health than those from the higher occupational groups. The ex-prisoners had no greater pre-war morbidity and the only explanation for the higher incidence of diseases e.g. nervous diseases and alcohol abuse is their imprisonment. Detailed tables and figures for each diagnostic group are given. The excessive stress increased the vulnerability of the ex-prisoners during the total observation period.

KRISTOFERSEN, Lars

83

Yrke og dødelighet: Tilleggsberegninger til tidligere analyser. (Occupational mortality: Additional estimates of previous analysis). Rapporter, No. 79/19. Oslo, Statistisk Sentralbyrå, 1979. 172 pp. ISBN 82-537-1044-5. English summary and table title.

Data are included on mortality in Norway for the period 1970-1973 for economically active persons by occupation and social class.

SKARSGÅRD, Torstein

84

Yrke og arbeidsforholds virkning på sykkelighet og dødelighet (The influence of occupation and conditions of work on morbidity and mortality). Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1976. 40 pp.

An occupational index on working conditions and job environment is developed and used as explanatory variable in an analysis of variation in morbidity in specific age intervals (restricted to illnesses that caused at least one month of disability to work). Data from the Occupational History Study is used for this purpose. The author also discussed the variation in mortality by occupation, as given in the special analysis carried out by SSB (Yrke og dødelighet 1970-73, SA nr. 21, SSB, Oslo, 1976), and relates some findings of this analysis to occupational variation in working conditions and job environment as expressed in the data from the Occupational History Study.

- STATISTISK SENTRALBYRÅ 85
 Yrke og dødelighet 1970-1973 (Occupational mortality 1970-1973).
 Statistiske Analyser, No. 21. Oslo, 1976. 111 pp. ISBN
 82-537-0561-1. English summary, table of contents, and table
 titles.
 "The table include figures on mortality for special occupational
 groups and social classes as well as regional figures for
 economically active and inactive persons".
- TØNNESEN, Bjørn L. 86
 Dødelighet og ekteskadelig status i Norge 1960-1962 (Mortality
 and marital status in Norway 1960-1962). Arbeidsnotater, IO
 73/34. Oslo, Statistisk Sentralbyrå, 1973. 86 pp.
 This study forms the half of a mortality study made in the
 Central Bureau of Statistics in 1971. This part focuses in the
 connection between mortality and marital status, also utilizing
 national data.
- TØNNESEN, Bjørn L. 87
 Enkelte trekk ved dødelighetsmønsteret i Norge 1960-1964
 sammenliknet med andre land (Some features of the pattern of
 mortality in Norway 1960-1964 compared to other countries).
 Arbeidsnotater, IO 74/15. Oslo, Statistisk Sentralbyrå, 1974. 84 pp.
 A comparison of Norwegian male mortality by occupation. The
 data are extracted from an early version of the central population
 register containing the 1960 census and vital events 1960-1964.
 Mortality statistics from Norway and other countries are used as
 well.
- E.7. Mortality by Cause
- BACKER, Julie E. 88
 Statistisk oversikt over krigsdødsfallene 1940-1945 (Statistical
 survey of war deaths, 1940-1945). Statistiske Meddelelser
 (Oslo) 66 (10-12): 450-461. 1948.
 Deaths of Norwegian citizens, caused by war operations in Norway
 or abroad, and including the underground.
- BLIX, Ellen 89
 Mortality from cardiovascular diseases in Norway. Arbeidsnotater,
 IR 65/1. Oslo, Statistisk Sentralbyrå, 1965. 12 pp.
 A study of variations in sex-age specific death rates by geo-
 graphical regions and types of municipalities.
 A significant correlation between the male mortality level and
 the population density gradient from county to county was found,
 more decisive than geographical region or climatic conditions. This
 factor did not, however, influence the mortality level of females
 to any great extent. The rapid increases in the male death rates
 in the late 1950ies was most pronounced for arteriosclerotic
 and degenerative heart diseases and in particular for deaths assigned
 to coronary disease.
 Standardized death rates for all ages and for the age-group
 40-69 years, compiled from the official cause of death statistics
 1959-1962.

- RETTERSTØL, Nils 90
 Selvmord, død og sorg (Suicide, death and grief). Rev.ed.
 Oslo, Universitetsforlaget, 1978. 298 pp.
 The problem of suicide is presented from psychological and sociological viewpoint. The Scandinavian statistical data are presented, and the Scandinavian differences discussed. Original results are presented as to the clinical and social development after suicidal attempt.
- STRØM, Axel; and JENSEN, Roald Adelsten. 91
 Kretsløpslidelser som hygieneproblem (Diseases of the circulatory system and preventive medicine). Nordisk Hygienisk Tidsskrift (Stockholm) 31 (1-2): 123-151. 1950.
 The rise in the mortality from diseases of the circulatory system has confronted preventive medicine with new problems. As there is evidence that living conditions may play a role, the authors have investigated the behaviour of these diseases in Norway during the years of the German occupation (1940-45). From 1941 onwards a marked decline in the mortality from cardiovascular diseases took place. The mortality reached its lowest point in 1943/44, followed by a sharp rise in the post-war years. Coinciding with this decline the average calorie content of the food fell with 17-18 %, mainly due to a reduction in the fat component. A marked correlation was found between the cardio-vascular mortality and the consumption of fats rich in cholesterol: milk, cream, butter, cheese and eggs. The authors conclude that dietary restrictions may be a means to prevent cardio-vascular diseases.
- WAALER, Hans T.; and HJORT, Peter F. 92
 Tapte leveår: hva betyr de enkelte dødsårsaker? (Lost years of life: the significance of single causes of death?). Tidsskrift for den Norske Lægeforening (Oslo) 98 (14): 720-725. May 20, 1978. English summary, p. 749.
 The life expectancy (e_0) has been calculated on the assumption of hypothetical eliminations of each of 24 groups of causes of death for Norway 1973-74. "Violent deaths" attain a more prominent place in the mortality picture by this method than by usual statistical information on causes of death. A comparison is included between Norway and Finland for selected causes of death.
- ZEINER-HENRIKSEN, Truls 93
 Total og årsaksspesifikk dødsrisiko i relasjon til røyking og andre miljøfaktorer blant menn og kvinner i Norge (Total and cause-specific mortality risk related to smoking and other environmental risk factors among males and females in Norway). Tidsskrift for den Norske Lægeforening (Oslo) 98 (22): 992-997. 1978. English summary.
 "The basic material is a self-administered questionnaire sent to samples of the adult Norwegian population. Over 26 000 responding males and females were followed up for death from 1965 to 1974. The 10-year total and cause-specific mortality risk in relation to smoking, relative weight, index, physical exercise status, occupational group, and urban/rural residence, is presented.

The smoker/nonsmoker mortality risk ratio was 2.0 for males and 1.3 for females 35-54 years , against 1.2 for both sexes in the 55-69 age group. Mortality risk increased strongly with amount smoked. Age of starting smoking showed a strong negative association with mortality. Lung cancer risk was 6-7 times higher for smokers than for nonsmokers for both sexes.

Physical exercise showed a strong negative association with mortality risk, especially for cardiorespiratory diseases. Men in agriculture had lowest mortality risk, seamen and fishermen highest. In the "manuf. etc." group lung cancer mortality was 3.5 times higher than among men in agriculture.

The strong increase in coronary heart disease among middle aged men in Norway from 1950 to 1970 is discussed in relation to changes in environmental risk factors".

F. FERTILITY

F.1. General Fertility

- AMUNDSEN, Kåre; and VOGT, Johan. 94
 Notater over brutto og netto reproduksjonstall. (Notes on gross and net reproduction rates). Memorandum, Universitetet i Oslo, Sosial-økonomisk institutt, Sep. 12, 1960. 34 pp.
- BACKER, Julie E. 95
 Bevegelsen i den ekteskapelige fruktbarhet i Norge 1931-1954 (The trend of fertility in Norway 1931-1954). Statistiske Meldinger (Oslo) 74(5):117-132. 1956. With English translation of title and headings.
 Analysis of the fertility of marriage cohorts in Norway, 1931-1954, with a review of data on birth and marriage rates, 1916-1954.
- BERGE, Erling. 96
 Regionale variasjoner i fertiliteten i Norge omkring 1970. (Regional differential of fertility in Norway around 1970). Arbeidsnotater, IO 74/40. Oslo, Statistisk Sentralbyrå, 1974. 50 pp.
 Regional differentials of fertility are computed for counties and aggregates of communes called fertility-regions. The fertility differentials follow a center-periphery pattern. The differences are assumed related both to material and cultural aspects of the local social systems within each region. Distinguishing between level and age-pattern of fertility, the level seems to be more influenced by material aspects of the local system, the age-pattern seems most affected by the age and sex composition of the population within the region. Classifying regions according to total fertility rate (level) and modal age of childbearing revealed four fertility patterns. They were labeled the urban fertility pattern, the eastern, the western and the northern fertility pattern.
- BERGE, Erling 97
 The social ecology of human fertility in Norway 1970. Ph.D. dissertation. Boston, Boston University, 1981. 367 pp.
 The present work presents a theoretical explanation of the regional differentials in fertility observed in Norway in 1970.
 From an actor and exchange-oriented point of view, concepts of social structure and social processes are developed such that they permit factors derived from a factor analysis of Norway's social/ecology in 1970 to be interpreted as measures of basic dimensions of differentiation of the social structure.
 A pivotal argument of the theoretical discussion is the different dynamic consequences for the social structure of exchanges based on inalienable experiences versus alienable goods. From this distinction, two types of dimensions are derived: socio-economic dimensions and community dimensions.
 The theoretical framework is then applied to the decision-making process in families as it affects conceptions and births. The general expectation is that families located in areas having high scores on socio-economic dimensions will find it to their advantage to limit their number of children severely. High scores on community dimensions, on the other hand, indicate a social structure where a relatively larger number of children will be advantageous.
 Four parameters describing the fertility level and age pattern of child bearing were estimated by means of analytic graduation. The

parameters were put into a regression analysis as dependent variables with the factors as the major explanatory variables. For the four parameters, the amount of explained variance ranged from 81 per cent to 94 per cent.

BERGE, Erling; and HOEM, Jan M.

98

Nokre praktiske røynsler med analytisk glatting. (Some practical experiences with analytic graduation). Statistisk tidsskrift (Stockholm), Series 3, 13(4):294-309. 1975. English summary.

The authors have tried to investigate whether the Hadwiger function is systematically better or worse as a graduating function than a function proportional to the density of the gamma distribution, called the GG function here. The results do not provide anything like an unambiguous answer. In a large number of cases, the GG function fits the data better than the Hadwiger function. On the other hand, the latter seems to be the more flexible one, and there is evidence that it may be superior when the fertility curve is strongly skewed to the left and has a heavy upper tail.

Once a graduating function has been selected, one may get considerable variation in the estimates of its parameters as well as in the curves fitted by varying the (single year) age classes included in the graduation process. This is particularly noticeable when the graduation is carried out by means of chi-square. It is less important (in our data) in least squares graduation. The reason is that the former method gives more weight to age classes where fertility is small. Since this is the case for ages above age 45, say, the upper tail of the graduating function will be pressed down towards the abscissa axis more decisively the more of the higher age classes one includes in the graduation. Even though fertility is low at the very early ages too, no similar effect has been seen in that tail in the present data.

BRUNBORG, Helge.

99

Fruktbarheten til fødselskohorter av norske kvinner etter 1925 (Fertility of birth-cohorts of Norwegian women after 1925). Arbeidsnotater, IO 75/27. Oslo, Statistisk Sentralbyrå, 1975. 42 pp.

This paper presents age-specific fertility rates by birth-cohort for Norwegian women born 1925 and later.

DYRVIK, Ståle.

100

Ekteskap og barnetall - ei gransking av fertilitetsutviklinga i Norge 1920 - 1970 (Marriages and number of children - An analysis of fertility trend in Norway 1920 - 1970). Artikler, No. 89. Oslo, Statistisk Sentralbyrå, 1976. 48 pp. ISBN 82-537-0658-8. English summary.

An analysis of marriages and the number of children as observed in the census of 1970, with reference to the long-term trend 1920-1970.

GILJE, Eivind.

101

Fitting curves to age-specific fertility rates: Some examples. Statistisk Tidsskrift (Stockholm) 7(2): 118-124. 1969. Arbeidsnotater, IO 68/25. Oslo, Statistisk Sentralbyrå, 1968. 20 pp.

A number of mathematical curves have been fit to age-specific fertility data from Norway, Hungary and Norwegian regions. The article concludes that a variant of a function originally suggested by the Swiss mathematician Hadwiger gives the best overall fit in preference to the Gramme function or a polynomial of the fourth degree.

- GILJE, Eivind. 102
 Analytic graduation of age specific fertility rates. Artikler, No. 51. Oslo, Statistisk Sentralbyrå, 1972. 49 pp. ISBN 82-537-0200-0.
 This booklet contains two previous articles (Gilje, 1969 or 1968 and Gilje and Yntema, 1971) abstracted elsewhere, plus a 'Note on population size and age-specific fertility rates'. The note is concerned with estimating age-specific fertility rates in very small populations using the same graduation technique as in the other two articles. It concludes that the average number of person-years of observation per female singleage group in ages 15 to 44 should probably not be below 70. At the same time, the smallest age groups should not be too small, preferably not below some 50 person-years of observation.
- HOEM, Jan M. 103
 Fertility rates and reproduction rates in a probabilistic setting. Biométrie-Praximétrie (Wetteren) 10(1):38-66. 1969. Erratum 11(1):20. 1970.
- HOEM, Jan M. 104
 Probabilistic fertility models of the life table type. Theoretical population Biology (New York) 1(1):12-38, . May, 1970.
- HOEM, Jan M. 105
 Fertility and outmigration: Reflection on research approaches in empirical investigations of the association between two demographic phenomena. In Demographic, Economic and Social Interaction, edited by Å.E.Andersson and I. Holmberg, pp.55-84. Cambridge, Massachusetts, Ballinger Publ. Co., 1977. ISBN 0-88410-045-6. LC 76-2042.
 To illustrate research strategies pertinent to the analysis of an association between two demographic phenomena, this paper focuses on the co-variation of fertility in a peripheral district and out-migration of women from the district to the urban centers of the country. The causal factors at work are discussed and it is shown how these factors are reflected in the various elements of a suitable model for childbearing and out-migration. Scientific hypotheses are formulated in terms of basic characteristics of the model. The author hopes that this paper will give an elementary but instructive demonstration of the usefulness and flexibility of Markov chain models with a continuous time parameter.
- HOEM, Jan M.; and BERGE, Erling. 106
 Theoretical and empirical results on the graduation of fertility curves. Proceedings of the 8th International Biometric Conference, Constanta, Romania. Aug. 25-30, 1974. Pp. 363-371.
 The authors report briefly on some typical findings from the application of analytic graduation methods to a number of empirical fertility curves. The theory and empirical results are relevant for other curves of vital rates of a similar form (marriages migration, etc.).
- HOEM, Jan M.; Berge, Erling; and HANSEN, Liv. 107
 Norske fødselsrater for ettårige aldersklasser, 1968-1972 (Norwegian age-specific birthrates 1968-1972). Arbeidsnotater, IO 74/24 (Metodehefte, No. 12). Oslo, Statistisk Sentralbyrå, 1974. Pp. 19-33.

- HOEM, Jan M.; and HOLMBECK, Britta. 108
 The demographic interpretation of the basic parameters in Hadwiger fertility graduation. *Statistisk tidskrift (Stockholm)* III 13(5):369-375. 1975.
 The authors consider the problem of interpreting the four parameters of a Hadwiger curve fitted to age-specific fertility rates. These four parameters may be interpreted as the total fertility rate, and the mean, the mode, and the variance of age at childbearing. They then define three other parameters which they suggest are more relevant to fertility projections.
- JAHN, Gunnar. 109
 Befolkningsspørsmål og familiens størrelse (The population question and size of family). *Statistiske Meldinger (Oslo)* 70(7):165-207. 1952.
 An analysis of fertility trends in Norway, based on data from the 1946 census with comparative data from the censuses of 1920 and 1930. The analysis deals with trends in number of children by duration of marriage, age at marriage, rural-urban residence, and occupation of husband. The analysis by occupation of husband shows a reversal of the usual findings of inverse relationship between number of children and occupational status.
- JAHN, Gunnar. 110
 Barnetallet i norske ekteskap (Fertility in Norwegian marriages). *Særtrykk av Folketellingen 1950, Hefte V. Oslo, Grøndahl og Søn, 1957. 92 pp. With English titles and summary.*
 Analysis and presentation of summary tables. Aspects considered: scope of the survey and method followed; average number of children per marriage by duration of marriage and by age of wife at marriage; average number of children per marriage in different parts of Norway; marriages by number of children; childless marriages; family size in different occupational categories; further details about the average number of children per marriage, according to the 1946 and 1950 censuses; some information concerning family size in the 19th century - women born in 1885, 1905, and 1910 and their reproduction.
- LETTENSTRØM, Gerd S. 111
 Ekteskap og barnetall - En analyse av fruktbarhetsutviklingen i Norge (Marriage and number of children - An analysis of fertility in Norway). *Artikler, No. 14. Oslo, Statistisk Sentralbyrå, 1965. 29 pp.*
 In this article changes in family size in Norway have been studied on the basis of census data 1920-1960. The tables used include marriages by number of children, age of wife at marriage, and duration of marriage. In addition, number of children by occupation of husband was studied. The intention was to show the reduction in family size due to voluntary family limitation.
- LETTENSTRØM, Gerd S. 112
 Fertility trends in Norway since the Second World War. *International Population Conference, London, 1969. Published by IUSSP, Liège, 1971. Vol. 2. Pp. 555-563.*
 The paper deals with changes in fertility rates during the period 1946-1966, and possible reasons for these changes. In addition to periodical data on fertility of females by age, cumulated fertility rates are calculated for marriage cohorts on the basis of annual data for marriages, births, etc.

- LETTENSTRØM, Gerd S. 113
 Fødselstall i ekteskapskohorter 1965-1972. En analyse på grunnlag av registerdata (Fertility of marriage cohorts 1965-1972. An analysis based on register data). Artikler, No. 82. Oslo, Statistisk Sentralbyrå, 1976. 64 pp. ISBN 82-537-0600-6. English summary and table titles.
 The study of fertility of marriage cohorts is based on data drawn from the central population register, in which system data on marriages, divorces, deaths and births are stored. The aim with this study was primarily to show how historical data from the population register system could be used for following studies.
- MYKLEBOST, Hallstein. 114
 The decrease of fertility in Norway, the spread of an innovation. Norsk geografisk tidsskrift (Oslo) 30(3):179-186. 1976.
 Fertility was radically reduced between 1900 and 1970, passing from a uniformly high level, through a transitional stage characterized by great regional diversity, to one of low fertility and moderate regional variation. The first phase can to a considerable extent be 'explained' by the varying degree of urbanization in individual provinces, and may be looked upon as the effect of a mainly hierarchic type of diffusion. In later years, variations in urbanization explain less of the regional differences, whereas a marked contrast can be observed between the centrally located East Norway and the rest of the country. The process of change has gradually taken on more of the characteristics of 'contagious' diffusion.
 The regional pattern of fertility shows strong similarity to the regional variations in the attitude to the idea of European integration, as measured through the 1972 referendum on EEC membership.
- RAMHOLT, Per. 115
 Nuptiality, fertility and reproduction in Norway. Populations Studies (London) 7(1):46-61. July, 1953.
 "The vital and census statistics of Norway for the last 25 years are analysed in order to compute the average family size of different marriage cohorts, and to assess the extent to which the Norwegian population is replacing itself."
- SOGNER, Sølvi. 116
 Historisk demografi i Norge. En forskningsorientering med særlig vekt på studiet av fruktbarhet (Fertility in Norwegian family reconstitution studies). Nordisk demografi (Stockholm) 8:50-68. 1978.
 Four Norwegian family reconstitution studies are discussed with a view to fertility. Cottars show consistently lower fertility than farmers.
- VOGT, Johan. 117
 En undersøkelse over generasjonenes fruktbarhet i Norge (A study of generation fertility in Norway). Statsøkonomisk tidsskrift (Oslo) 70 (3): 181-204. Sep. 1956.
 Tabular and graphic presentation of data and textual analysis covering cumulative birth rates for the female cohorts born 1870-74 or 1925-29; survivorship tables and net reproduction tables for the different female cohorts; the relative distribution of number of children over the childbearing periode; the necessary gross reproduction rates, the replacement spans, and the nuptiality rates for the different cohorts; the number of children per marriage. Appendixes give supplementary data on cohort fertility, the calculation of survivorship for the different cohorts, and nuptiality rates.

- VOGT, Johan. 118
 Component parts of the number of births. *Statsøkonomisk Tidsskrift* (Oslo) 78(4): 287-307. Dec. 1964.
 "Our task in this paper consists in working out a method for measuring the role of these two factors (changes in marriage frequency and changes in number of children per marriage) separately with regard to changes in the number of births."
- VOGT, Johan; and WAALER, Hans. 119
 Computation of annual gross reproduction rates in Norway 1846-1932, and in England and Wales 1871-1921. A new method of computation. Institute of Demography, University of Oslo, Memorandum 1. Oslo, n.d. 33 pp.
 Critique of the net reproduction rate as developed by Richard Boeckh and Robert Kuczinsky, and of its past application to Norwegian data. Outline of method and presentation of results of recomputations of annual gross and net rates for Norway, 1846-1958, adjusted for the role of age composition and of revised data on births and deaths. Appendixes: Estimation of gross reproduction rates for England and Wales, 1871-1911 (by the method used for Norway, with tables); A note on the role of the age distribution of females in the reproductive ages (15-49 years) on the number of births, by Hans Waaler.
- ØDEGÅRD, Ørnulv. 120
 Season of birth in the population of Norway, with particular reference to the September birth maximum. *British Journal of Psychiatry* (Ashford, England) 131:339-344. Oct. 1977.
 The author examines birth records for the period 1891-1975 in order to show the monthly fluctuation in the number of births in Norway. Special attention is paid to the birth maximum occurring in the schizophrenic population.
- F.4. Actions and Activities Directly Affecting Fertility
- F.4.1. General Fertility Control and Contraception
- FYLLING, Petter; and JERVE, Fridtjof. 121
 Contraceptive before and after termination of pregnancy. *Contraception* (Los Altos, Calif.) 15(3):347-353. March, 1977.
 The authors examine the contraceptive use of 1,314 women in Oslo, Norway, who requested legal abortion in 1975. "At the initial visit (they) recorded the women's contraceptive practice a) during the last 2 years, b) during the last 3 months and c) the present methods, i.e. the method used when the unwanted conception took place".
- FYLLING, Petter; and SVENDSBY, Torunn. 122
 Contraceptive practice before and after therapeutic abortion. II. Use-effectiveness of oral contraceptives and intrauterine devices. *Fertility and Sterility* (Birmingham, Ala.) 32(1):24-27. July, 1979.
 In the present paper, the authors use data from a follow-up survey to estimate the continuation rate for oral contraceptives and IUDs following therapeutic abortion in Norway.

- GRÜNFELD, Berthold. 123
 Seksuell atferd, prevensjon og fruktbarhet blant kvinner i Oslo: enkelte sosiale aspekter (Sexuality, contraception, and fertility among female residents in Oslo: some social aspects). Tidsskrift for Samfunnsforskning (Oslo) 16(1):74-89. 1975.
 A report on the results of socio-ecological analyses relating residential class difference to variations in sexual behavior and fertility, based on data from a survey of approximately 500 young, married women residents of Oslo.

- WALLØE, Lars. 124
 Seksualitet, familieplanlegging og prevensjon i Norge (Sexuality, family planning, and prevention in Norway). Oslo, Universitetsforlaget, 1978. 264 pp. ISBN 82-00-01660-9. LC 79-346936.
 Topics covered include contraceptive methods and selection, the use of contraceptive by adults and by young people, age at first intercourse, sexual activity, abortion, and the relations between actual and planned family size.

F.4.4. Attitudes Toward Fertility and Fertility Control

- BLOM, Ida. 125
 Barn - fattigfolks rikdom? (Children - the wealth of the poor?) Forskningsnytt (Oslo) 1975, No. 7. Appendix pp. 10-15.
 The article outlines problems, source-material and methods to be applied in a research program concerning family planning in Norway since the end of the 19th century. It warns against concluding from European studies of family planning to non-european measures against over-population and concludes the family planning presupposes knowledge of contraception as well as a total life-situation motivating for reducing the number of births.

- BLOM, Ida. 126
 Kvinner i velferdsstaten - familiepolitikk og familieplanlegging (Women in the Welfare State - family politics and family planning). Fagforum, Skoleforum. Organ for norsk lektorlag. (Oslo) Oct. 1977. Pp. 48-53.
 The article discusses the conceptions "family policy" and "family planning" in a historical perspective, outlining conflicts between individual married women of different social standing and the state interests in Norway since the end of the 19th century.

- BLOM, Ida. 127
 Barnebegrensning - synd eller sund fornuft (Family planning - sin or common sense). Bergen-Oslo-Tromsø, Universitetsforlaget, 1980. 355 pp. ISBN 82-00-01984-5.
 The book investigates the fall in marital fertility in Oslo between 1890 and 1930. On the basis of theories in international research on the demographic transition, attempts are made at getting behind aggregate statistics, tracing social differences in fertility patterns. Drawing on new sources, especially on letters and other material left by the first Norwegian Mother Clinic and on women's magazines, sex-differentiated motives for family planning are analyzed on micro- and macrolevels and for socially different parts of the town. A study of contraceptive practices and of the frequency of abortions, based mainly on doctor's reports, serves to answer the question of how families reduced the number of births. The last

chapters outline the Norwegian fight over legislation and information concerning family planning up to the present day.

BULL, Ida.

128

Norske legers holdning til spørsmålet om barnebegrensning (The Norwegian medical professions attitudes to birth control). *Historisk tidsskrift* (Oslo) 56(4):398-432. 1977. English summary.

The article focuses on the Norwegian medical professions attitudes to contraception and abortion in the period 1915-1939. All the Norwegian medical periodicals in the period are analysed. Two main attitudes are identified with regard to contraception: The restrictive point of view, contraception only on medical grounds, based on the doctors decision, and the liberal point of view which implied that every couple should have the possibility of limiting the number of children. The article discusses the arguments used, and the change in the period from the restrictive to the liberal standpoint. The attitude to abortion is discussed along similar lines.

GANES, T.; HANSTEEN, V.; LIE, M.; REIGSTAD, A.; and SEJERSTED, O. Editors.

129

Abort eller prevensjon? En undersøkelse over 2 794 pasienter ved Sosialistiske legers forenings klinikk for seksuell opplysning (Abortion or contraception? A study of 2 794 patients consulting a clinic for sexual information run by the Norwegian association of socialistic doctors). Oslo, Gyldendal Norsk Forlag, 1975. 169 pp. ISBN 82-05-08228-6.

The book compares the age, socioeconomic background, education and previous information of contraception in 2 794 patients consulting the clinic either for prescription of a contraceptive or for abortion application.

The 1 707 women coming for contraception had a significantly higher socioeconomic background and better education than the corresponding 1 087 abortion applicants. The latter group also frequently lived in relatively poor areas of Oslo. The most frequent reason for abortion application was either interpersonal problems towards the partner or that this relationship was finished.

Evaluation of the local abortion-decision bureaucracy revealed large differences and the data strongly suggested that approval or rejection of an application depended on the attitude of the local abortion bureaucracy rather than on the application.

A follow up study showed that of the applicants rejected 35 per cent still had an abortion, either illegally or performed outside the country.

GANES, T; and SEJERSTED, O.

130

Abortsøkende kvinners syn på betydningen av sosiale hjelpetiltak som alternativ til provosert abort (Social benefits as an alternative to induced abortion. An inquiry among abortion applicants in Oslo). *Tidsskrift for den Norske Lægeforening* (Oslo) 96(13):768-770. 1976.

"Seventy-three applicants for legal abortion were asked about their attitude towards social benefits as an alternative to abortion. Economic and housing difficulties had been important factors for 52 per cent of the applicants but only 23 per cent were interested in information on the social benefits available if they completed the pregnancy. None of the applicants believed that social benefits and efforts to solve their housing problems would change their decision of applying for a legal abortion. Even if all economic and housing problems were eliminated, 93 per cent would not have withdrawn their abortion application."

- GRÜNFELD, Berthold. 131
 Legal abort i Norge. Legalt svangerskapsavbrudd i Norge i tidsrommet 1965-1971. En sosialmedisinsk og sosialpsykiatrisk undersøkelse (Legal abortion in Norway. Legalized pregnancy interruption in Norway in the period 1965-1971. A sociomedical and sociopsychiatric examination). Oslo, Universitetsforlaget, 1973. 388 pp. LC 73-337275.
- REIGSTAD, Astor; and ARNESEN, Egil. 132
 Abortproblemet belyst ved kliniske og epidemiologiske forhold i Oslo i tiden 1960-1973 (Abortion in Oslo 1960-1973). Tidsskrift for den Norske Lægeforening (Oslo) 94(16):1059-1064. 1974. English summary.
 The present abortion law in Norway was introduced in 1960 and took effect in 1964.
 The indications allowed are medical and mental health, fetal and humanitarian. At first, the law had a restrictive effect but later there has been a gradual liberation. In Oslo, legal terminations as ratio per 1 000 births have increased from 67 in 1964 to 385 in 1973 and are now at the same level as in states where abortion is legalized. Hospitalized incomplete abortions have decreased from 123 to 63 per 1 000 pregnancies in the same period, most probably due to a reduction in complicated criminal abortions. There has been a rapid rise in the use of effective contraceptive technics (P-pill, IUD and sterilization) which has reduced fertility in Oslo. No rise in ectopic pregnancies has occurred. Premature births have shown a slight reduction since 1969.
- REIGSTAD, Astor; and ARNESEN, Egil. 133
 Febril og illegal provosert abort (Infected and criminal abortion). Tidsskrift for den Norske Lægeforening (Oslo) 94(16): 1064-1068. 1974. English summary.
 A retrospective study of 1 946 patients admitted to a general surgical department in Oslo for treatment of incomplete abortion in the period 1960-1973 is reported. Four hundred and sixteen were classified as infected and/or criminal abortions, 1 477 as spontaneous.
 There has been a significant reduction in the number of infected abortions parallel to the rapid rise in legal terminations. Several of the infected patients were seriously ill and one patient died. Early curettage under antibiotic cover is recommended as the treatment of choice.
 In the course of the period studied, spontaneous abortions have become less infected and less haemorrhagic indicating that even some of these might have been induced under risky circumstances.

F.5. Factors Other than Contraception Affecting Fertility

- ASMERVIK, Sverre. 134
 Ungdom og seksualitet (Adolescence and sexuality). Fakkellbook, No. 246. Oslo, Gyldendal Norske Forlag, 1972. 100 pp. ISBN 82-05-05384-7.

F.6. Fertility Outside Marriage

SOGNER, Sølvi.

135

Illegitimacy in old rural society: Some reflections on the problem arising from Norwegian family-reconstitution Studies. In *Chance and Change*, edited by S. Åkerman, Hans Chr. Johansen and D. Gaunt, pp. 61-68. Odense, Odense University Press, 1978. ISBN 87-7492-248-3.

The rise in illegitimate and pre-marital fertility from the late 18th century are seen as interrelated phenomena and discussed on the basis of two Norwegian family reconstitution studies and of the works of Eilert Sundt, the 19th century social scientist. Deteriorating economic conditions in the period made marriage increasingly difficult on a traditional agricultural basis. Cohabitation before marriage, which must have been socially acceptable judging from the high frequency of pre-nuptial conceptions (about 2/3), became gradually stigmatized. The change of norms accompanies a growing social misery, as relatively more births become illegitimate births instead of first births, premaritally conceived.

SOGNER, Sølvi; and OLDERVOLL, Jan.

136

Illegitimate fertility and the marriage market in Norway, 1800-1850. Regional variations. Pp. 495-510. In *Marriage and Remarriage in Populations of the Past*, eds. J. Dupâquier et. al. London, Academic Press, 1981. 663 pp. ISBN 0-12-224660-8.

In the 19th century Eilert Sundt demonstrated that the number of illegitimate births co-varies with the number of marriages. He also pointed out a distinct regional variation in illegitimacy - South - western Norway showing consistently low illegitimacy figures. The paper focuses on the problem of regional variation. A casual relationship is assumed between economic conditions and marriage possibilities, operating through social norms. The exact mechanisms may be hard to discern, because a time-lag is usually involved. If economic conditions are unfavourable, people marry at advanced ages and in restricted numbers, they remarry to safeguard economic stability, and they are non-permissive of illegitimate births. If economic conditions are good, it is the other way around. Once the demographic pattern is well established, however, it may be slow in changing, despite a change in economic circumstances.

1800-1850 in Norway is a period of rapid change. There is a trend towards later marriage, as well as a rise in illegitimacy, but no consistency is discernible in the overall pattern when studying the demographic variables alone. The development may possibly be explained by the general economic development. Whereas the low-illegitimacy region was traditionally dependent upon the export-fisheries as a necessary supplement to agriculture, the high-illegitimacy region got the extra income from the lumber export. Compared to 18th century conditions, a complete change in terms of trade for these export industries took place about 1800. Fish goes up, lumber down. The demographic pattern long established in poverty-stricken Southwestern Norway only slowly changes with improved economic conditions - age at marriage, permanent celibacy, and remarriage for women fell from previous above average levels. As for deep-rooted attitudes towards illegitimacy, there is hardly any change at all.

G. NUPTIALITY AND THE FAMILY

G.1. Marriage and Divorce

- BERGE, Erling. 137
 Ekteskapeleg status i Norge 1965-75. Eit opplegg for analyse (Marital status in Norway 1965-75. A proposal of analysis). Arbeidsnotater, IO 75/37. Oslo, Statistisk Sentralbyrå, 1975. 41 pp.
 The proportion of never married women among the 20-24 years old dropped from 52% in 1930 to 13% in 1970. By 1973 it was 16% and evidently increasing. Among men 30-34 years of age the same proportion dropped from 36% in 1930 to 18% in 1970 and 16% in 1973. Population composition according to marital status seemd to be changing rapidly. Crude marriage and divorce rates for counties are presented, but more detailed data is lacking. In order to study the connection between changes in nuptiality and changes in the local social systems a proposal is presented for a reorganization and extension of the statistical files extracted from the Central registers of CBS.
 In an appendix Jan Mønnesland presents evidence of the extent of multiple events reported to the register for a person. Of all persons for which events were reported to the register, 1,2% had more than one event reported. Most of the multiple events consisted of combinations of movements or of marriage and movements. These combinations would have ot be guarded against in estimating transition rates between marital statuses within regions.
- BRUNBORG, Helge. 138
 Cohabitation without marriage in Norway. Artikler, No. 116. Oslo, Statistisk Sentralbyrå, 1979. 30 pp. ISBN 82-537-0955-2. Norwegian preface, table of contents, and summary.
 "This article presents data on cohabitation without marriage in Norway, based on preliminary results from the Norwegian Fertility Survey, 1977. Historical data on non-marital fertility and nuptiality are also included."
- DYRVIK, Ståle. 139
 Om giftarmål og sosiale normer. Ein studie av Etne 1715-1801 (On Marriage and social norms. The case of Etne 1715-1801). Tidskrift for samfunnsforskning (Oslo) 11(4): 285-300. 1970.
 The institution of marriage in the parish of Etne in the 18th century is explored with different methods. The striking social differences reveal the presence of downward social mobility and an hierarchic matrimonial market.
- DYRVIK, Ståle. 140
 Gagne-pain ou sentiments? Traits du remariage en Norvège au 19e siècle (Utility or Romance? Features of Remarriage in Norway in the 19th Century). Pp. 297-306. In Marriage and Remarriage in Populations of the Past, eds. J. Dupaquier et.al. London, Academic Press. 1981. 633 pp. ISBN 0-12-224660-8.
 The decline of remarriage in the 19th century is studied by means of a local example, showing two possible main causes: The sex imbalance due to emigration, and a profound change from "rational" to "romantic" marriage. Both causes seem particularly detrimental to elderly widows with many children.

- HOEM, Jan M. 141
 Concepts of a bisexual theory of marriage formation. *Statistisk tidsskrift* (Stockholm) III 7(4): 295-300. 1969.
- HOEM, Jan M. 142 142
 A probabilistic Approach to Nuptiality. *Biométrie-Praximétrie* (Wetteren) 11(1): 3-19. 1970.
 "In the present paper a hierarchic timecontinuous age- and duration-dependent Markov process will be suggested as a nuptiality model. In the model each person is characterized at each moment by age, marital status, duration of current status, and number of marriages experienced.... The model... is unisexual... except in one segment (marriage dissolution), where both sexes enter symmetrically during part of the argument."
- KRISTIANSEN, Jan E. 143
 Divorce in Norway. *In Divorce in Europe*, edited by Robert Chester. Publications of the Netherlands Interuniversity Demographic Institute and the Population and Family Study Centre, Vol. 3. Pp. 53-68. Leiden, Martinus Nijhoff Social Science Division, 1977. ISBN 90-207-0652-7.
 This book represents an attempt by the Groupe International de Recherches sur le Divorce to bring together basic materials and analyses concerning divorce in a wide range of European countries. Each author provides and comments on divorce statistics over a long period for the country concerned, including cohort data where available, and provides information on the characteristics of divorce.
- MØNNESLAND, Jan. 144
 Inngåelse og oppløsning av ekteskap: metoder til beskrivelse og årsaksanalyse (Entry into and exit from marriage: descriptive methods and causal analysis). *Arbeidsnotater*, IO 76/13 (Metodehefte, No. 17). Oslo, Statistisk Sentralbyrå, 1976. Pp 2-20.
 The article describes how Markov process models may be used as description of nuptiality patterns, and the judging problems due to f.i. aspects by the nuptiality market not reflected in these models. The article establish the conditions the Markov intensities are to follow in order to secure the two sex consistency (equal numbers of brides and bridegrooms). This way indirect functional links are established between these intensities and the composition of the marriage market.
- MØNNESLAND, Jan. 145
 Analytisk glatting av rater for første gangs giftermål (Analytic graduation of first-time nuptiality rates). *Artikler*, No. 119. Oslo, Statistisk Sentralbyrå, 1979. 38 pp. ISBN 85-537-1008-9. English summary.
 The article presents an analytic function describing marriage rates specific by age of both spouses as a function of those ages and eight parameters. The functional form made good fitting to the observation samples at different times and for both sexes. This makes the functional form handsome for graduating observation samples (representing a sample of about 900 numbers with 8 parameters), and an analytical tool for time series studies and predicting purposes.

- SAUGSTAD, Letten F.; and ØDEGÅRD, Ørnulv. 146
 Marital Distance and Fertility in Remarriages in Two Parishes in Norway between 1600 and 1850 compared with the First Marriages during the same Period. Pp 617-625. In marriage and Remarriage in Populations of the Past, eds. J. Dupaquier et.al. London, Academic Press, 1981. 663 pp. ISBN 0-12-224660-8.
 "The fertility and marriage pattern of remarriages are studied with particular reference to marital distance - number of farms between the residence of spouses."
- STATISTISK SENTRALBYRÅ 147
 Skilmisser 1971-1973 (Divorces 1971-1973). Statistiske Analyser, No. 16. Oslo, 1975. 59 pp. plus 1 separate errata slip. ISBN 82-537-0502-6. English front matter, table titles, and summary.
 "In addition to divorce rates for married couples in the various counties, by age, etc., special tables are compiled for those who were divorced in 1971-1973, but who were married at the census date in 1970. These tables show education, occupation, and dwelling conditions. Further, data for income in 1970 have been added."
- STATISTISK SENTRALBYRÅ 148
 Utvikling i giftermål og dødsfall 1911-1976 (Developments in marriages and deaths 1911-1976). Statistiske Analyser, No. 35. Oslo, 1978. 117 pp. ISBN 82-537-0812-2. English preface, table of contents, table titles and summary.
 The publication presents data showing the year to year development in the nuptiality in Norway from 1911 to 1976. The calculations are based on data from different sources which have been collected in a historic data file containing marriages, deaths and population size according to marital status. The methods used in establishing this file are presented, together with figures, comments and tentative explanations on the observed development.
- VOGT, Johan. 149
 Befolkningsutvikling og ekteskapsstruktur i Norge (Population development and marital status in Norway). Statsøkonomisk Tidsskrift (Oslo) 66(1): 1-39. April, 1952.
- G.2. Family and Household
- DYRVIK, Ståle. 150
 Barnet i familien og slektskrinsen (The child in the family and among relatives). Forskningsnytt (Oslo) 24(4): 8-13. 1979.
 A demonstration of the fundamental change in the size and composition of the human group of family members and relatives surrounding a child in 1875 and today.
- ELIOT, Thomas D.; et al. 151
 Norway's families: trends, problems, programs. Philadelphia, University of Pennsylvania Press, 1960. 485 pp.
 "...study of family, survey of familyrelated social problems, and appraisal of programs and policies..."

- GRØNSETH, Erik. 152
 Ekteskap og familie i Norge: demografiske data (Marriage and family in Norway: demographic data). Oslo, Institutt for Samfunnsforskning, 1963. In 3 vols. xxxii, 394 pp.
 Vol.1. Den norske befolknings ekteskadelige, familie- og husholdningsmessige stilling ca. 1950 (Marital, family, and household status of the population of Norway about 1950).
 Vol.2. Befolkningens husholdnings- og familimessige stilling (Household and family situation of the population).
 Vol.3. Ekteskapsinngåelse og oppløsning ved skilsmisse (Marriages contracted and broken by divorce).
- SKREDE, Kari. 153
 Livssyklus, sosial likhet og sosial endring. Ekteskap, barn og husholdssammensetning (Life cycle variation, social equality and social change. Marriage, children and composition of household). Yrkeshistorieprosjektet. Arbeidsnotat, No. 10. Oslo. INAS (Institutt for anvendt sosialvitenskapelig forskning), 1976. 86 pp.
 Contains chapters 6 and 7 in the general, descriptive report from the Occupational History Study.
 Chapter 6. Marriage and children: Describes the variation in marriage activity and marital status, age at marriage and marital fertility. Description structured as a)-c) in chapter 1 - see description above.
 Chapter 7: Describes the variation in household composition and the frequency of change in household composition. Description structured as a)-c) in Ch. 1 - see no. 220.
- SOGNER, Sølvi. 154
 Freeholder and cottar. Scandinavian Journal of History (Uppsala) 7(3-4): 181-199. 1976.
 Property relationship have a bearing on the social structure of the peasant community in Norway in the 18th century, through the way they affect household establishment. Division of farms was regulated by law, and different rules applied to freehold and tenant holdings. Regulated by law was also the right to give settlement to cottars, or rent lodgings to independent households. The 18th century saw a massive transition towards freehold ownership. The population growth of the period may be seen against a background where the right to establish new households on the land was greatly diffused.
- SOGNER, Sølvi. 155
 Familie, husstand og befolkningsutvikling (Family, household and population growth). Heimen (Trondheim) 17(3): 699-710. 1978.
 On the basis of household-listings in 1762 and 1801 it is possible to distinguish between two types of household structure within a Norwegian parish. The simple nuclear family household with few members, and practically no servants, lodgers or resident kin is prevalent among cottars, whereas the numerous household of the extended or the multiple family (i.e. the stem family) is prevalent among the farmers. Legal and economic conditions are called into cause.

H. MIGRATION

H.2. International Migration

MAGNUSSEN, Olav; and SIQVELAND, Gunnar. 156

Migration from Norway to the USA, 1866-1914: the use of econometric methods in analyzing historical data. *Scandinavian Journal of Economics* (Stockholm) 80(1): 34-52. 1978.

"This article is a study in the use of econometric methods on a certain set of historical data (on) the mass migration from Norway to the USA during the period 1866-1914. An economic migration model is developed and tested. It is concluded that variations in Norwegian wages had a greater effect on Norwegian emigration to the USA than equivalent in U.S. wages, i.e. 'the push was greater than the pull'. It is further concluded that variations in ticket prices from Norway to the USA had no measurable effect on the number of emigrants from Norway."

SEMMINGSSEN, Ingrid. 157

Veien mot vest. Utvandringen fra Norge 1865-1915 (The road towards West. Emigration from Norway 1865-1915) Oslo, Aschehoug & Co., 1951. 528 pp.

Describes the flow of emigration from Norway in the period of mass emigration and the settlement of Norwegians in overseas countries, stresses the rural character of the movement and sees part of the growing urban emigration, especially from fast growing cities as stage emigration originating in rural districts. As emigration from Norway was strongly American-centered, Settlement in the United States and Canada is given a large amount of space, whereas emigration to other countries e.g. Australia, New Zealand and South Africa is more summarily treated.

The author discusses the various explanatory factors of the three big emigration waves of the period taking into account demographic factors, business cycles in sending and receiving countries, the transformation of rural society, the role of the transatlantic shipping companies, the opening of the American West especially through the Homestead Act of 1862 and the sending of prepaid tickets.

SEMMINGSSEN, Ingrid. 158

Norwegian emigration in the nineteenth century. *Scandinavian Economic History Review* (Uppsala) 8(2): 150-160. 1960.

Paper given at the International Congress of Historical Sciences Stockholm 1960. Contains a summary of the viewpoints brought forward in the earlier work of the same author.

SEMMINGSSEN, Ingrid. 159

Emigration from Scandinavia. *The Scandinavian Economic History Review* (Copenhagen) 20(1): 45-60. 1972.

Paper given at the congress of Nordic historians, Copenhagen 1971. A critical analyses of the various articles in the report on mass emigration from the Nordic countries that was one of the main discussion themes at the congress with emphasis on the different migration patterns that developed in various districts and the importance of the early development of a migration tradition.

- SEMMINGSSEN, Ingrid. 160
 Family Emigration from Bergen 1874-1892. In Americana Norvegica 3, edited by Sigmund Skard and Henry H. Wasser. Pp. 38-63. Oslo-Bergen-Tromsø, Universitetsforlaget, 1971.
 Through computer analysis of the emigration protocols (the basic material for Norwegian emigration statistics) and of the information they contain on age, civic status, occupation and birthplace of the emigrants who gave Bergen as their last domicile the author tries to substantiate the hypothesis that part of the emigration from growing cities was stage emigration. She also discusses the criteria for characterizing an outflow as stage emigration.
- SEMMINGSSEN, Ingrid. 161
 Nordisk utvandningsforskning (Nordic Research into Emigration). Historisk tidsskrift (Oslo) 56(2): 143-172. 1977.
 A survey and an analysis of the voluminous migration research carried out in the various Nordic countries since 1960, especially in Sweden through the research project "Sweden and America after 1860" at the University of Uppsala.
- SEMMINGSSEN, Ingrid. 162
 Origin of nordic emigration. American studies in Scandinavia 9(1-2): 9-16, 1977.
 Very short discussion of the causes of the early Norwegian exodus compared to the neighboring countries.
- SEMMINGSSEN, Ingrid. 163
 Nordic research into emigration. Scandinavian Journal of History 3(2): 107-129. 1978.
 A slightly abbreviated translation into English of the Article in Historisk tidsskrift 1977 mentioned above.
- SEMMINGSSEN, Ingrid. 164
 Drøm og dåd. Utvandringen til Amerika. Oslo, Aschehoug & Co., 1975. 167 pp. ISBN 82-03-06579-1. Translated into English under the title Norway to America. Minneapolis, Minnesota, Minnesota University Press, 1978. ISBN 0-8166-0842-3.
 A short synthetic survey of Norwegian emigration, settlement in the United States, the development of a "community" of emigrants through various organizational activities like church, press etc. and the gradual assimilation process. The author tries to incorporate viewpoints of more recent migration research in her account.
- STATISTISK SENTRALBYRÅ 165
 Inn- og utvandring for Norge 1958-1975 (Immigration to and emigration from Norway 1958-1975). Statistiske Analyser, No. 33. Oslo, 1977. 97 pp. ISBN 82-537-0793-2. English summary.
 This paper is a survey of the development of immigration to and emigration from Norway during the period 1958-1975. Immigrants and emigrants are described by demographic composition and land of origin or destination.
 Much of the analysis of the various groups of citizens is based on the hypothesis, that immigration of Norwegians and emigration of foreigners may in general be considered as return movements, the emigration being the primary migratory movement of Norwegians, and immigration being the primary movement of foreign citizens.

- SVALESTUEN, Andres A. 166
 Tinns emigrasjonshistorie, 1837-1907 (A history of emigration from Tinn, 1837-1907). Växjö, Sweden, Scandinavian University Books, 1971. 381 pp.
 This book includes chapters on the following topics: the general social and economic background of the emigration stream from Norway during the nineteenth century; the consequences of this emigration for the town of Tinn; and a statistical analysis of the causes of emigration, including a peak and trough analysis of short-term fluctuations.
- SVALESTUEN, Andres A. 167
 Five local studies of Nordic emigration and migration. In Nordic Population Mobility, edited by Bo Kronborg, Thomas Nilsson and Andres A. Svalestuen. American Studies in Scandinavia 9(1-2): 17-63. Bergen, Universitetsforlaget. 1977.
 This is comparative survey of the five microstudies made within the framework of the research project "Nordic Emigration", on which "Nordic Population Mobility" is the final report. The research areas are the parishes Toholampi in Vaasa county, Finland, Alfta in Gävleborg county, Sweden, Ullensaker in Akershus county, Norway, Torslev in Hjørring county, Denmark, and Vopnafjörður in the north-eastern part of Iceland. The principal theme is mass emigration to America during the second half of the 19th century and, to some extent, internal in- and out-migration during the same period. In this paper some of the main results are analysed and compared.
- SVALESTUEN, Andres A. 168
 Om den regionale spreininga av norsk utvandring før 1865 (On the regional distribution of Norwegian Emigration before 1865). In Utvandringa - det store oppbrotet, edited by Arnfinn Engen, pp. 57-85. Oslo, Det norske samlaget, 1978. ISBN 82-537-0815-6.
 In this article the author investigates the geographical expansion of Norwegian emigration from its earliest beginning in the year 1825 and down to the onset of mass emigration after 1865.
 By using available statistical data and other relevant source material, an attempt is made to explain the sharp regional differences in the emigration rates, and how the information and rumours about America were spread in a pre-industrial, agrarian society.

H.3. Internal Migration

- BRUN, Stein Erland. 169
 Boligflyttere og arbeidsflyttere. Befolkningsmessige og sysselsetningsmessige konsekvenser av en eventuell ilandføringsterminal på Sotra simulert ved en systemdynamisk modell (Labour market and population impacts of a possible petroleum terminal on the island of Sotra, as simulated by a system dynamics model). Hovedfagsoppgave i geografi høsten 1978. Geografisk institutt, Universitetet i Bergen 138 pp + 54 (vedlegg).
- BYFUGLIEN, Jan. 170
 Hva forteller folketellingene 1960 og 1970 om befolkningens skifte av bosted i perioden (What the censuses of 1960 and 1970 tell us about changes of residence in the period). Plan og arbeid (Oslo) 1977 (4): 161-167.
 The paper first discusses a data set consisting of the same persons as registered in the 1960 and the 1970 census. Then this data are used to give a short description of where these persons lived by the

time of the two censuses. The analysis is restricted to the county level.

FOSS, Olaf; REISZ, Bjørn; SALOMON, Robert; STORDAHL, Erik; and ØSTBY, Lars. 171

Flyttemotivundersøkelsen 1972 (Survey of migration motives 1972). Samfunnsøkonomiske Studier, No. 35. Oslo, Statistisk Sentralbyrå, 1977. 233 pp. ISBN 82-537-0783-5. English summary, tabel of contents, and table titles.

Data from the 1972 Survey of Migration Motives are used to determine causes of migration, positive and negative changes in the migrants' situations, the composition of the various migration streams by non-demographic characteristics, and the implications of migration processes for regional planning. Attitudes toward future moves, locational preferences, and migration between urban areas are also examined in this attempt to improve the basis for regional population forecasting.

GADE, Ole. 172

Spatial Process and Change in a depressed area. A study of migration in Nordland county, Norway. Ph.D. Dissertation. University microfilms, Ann Arbor, 1972. 214 pp.

GINSBERG, R. B. 173

The relationship between timing of moves and choice of destination in stochastic models of migration. *Environment and Planning A* (London) 10(6): 667-679. June, 1978.

"The importance of studying the relationship between the timing of moves and the choice of destination is discussed in terms of theories of decision processes and of methodological issues in the analysis of migration histories. Special attention is given to duration-residence effects. Statistical procedures based on the theory of competing risks and semi-Markov processes are developed and applied to residence histories of Norwegian men, 1965-1971. Subject to several qualifications, the results confirm the hypothesis that decision of whether to move and where to go are independent."

HANSEN, Jens Chr. 174

Flyttinger i Norge 1967 (Migrations in Norway 1967). *Norsk Geografisk Tidsskrift* (Oslo) 23(2): 91-103. 1969.

"The Census Bureau has published migration data from 1967 in the form of a matrix of movements between 104 'trade districts' (td), and also provided an unpublished matrix for 454 communes. Migrations concerning Bergen, Trondheim and Kristiansand tds. have been analysed on three levels: a) inter-communal migrations within the 3 tds, b) migrations between the tds and tds in the neighbouring counties, and c) migrations between the tds and the rest of the country. The data show that the importance of migrations from rural areas to towns has been exaggerated in public opinion, whereas the importance of other migration types has been underestimated."

HELVIG, Magne. 175

Forskyvningstendenser i yrkesbefolkning og bosetting (The tendencies of change in (Norway's) economically active population and the settlement pattern). *Samferdsel* (Oslo) 1965(3): 18-23.

The article summarizes one of the main studies forming the basis for the automobile and traffic forecasts of the Norwegian National Highway Plan prepared in the 1960's. It deals with the post-war accelerated structural changes in industries and occupations and the

resulting locational shifts and urban concentration.

- HOLTE, Bente M.; and STANGEBY, Ingunn. 176
 Intraurban mobilitet. En studie av hvem som flytter hvor innenfor Oslo. Årsaker og konsekvenser (Intraurban mobility. A study of who is moving where in Oslo. Causes and implications). Hovedoppgave i sosiologi. Oslo, Institute of sociology, 1978. 248 pp.
 Using surveydata, data from the population censuses of 1960 and 1970 and data from the Office of the School director, the authors give a description of the mobility frequency of different population groups and the destination place of different mobility groups in Oslo. Causes and consequences are also discussed.
- LANGHOLM, Sivert. 177
 Short-distance migration, circles and flows: Movement to and from Ullensaker according to the population census lists of 1865. The Scandinavian Economic History Review (Odense) 23(1): 36-62. 1975.
 The article arose from the 'Ullensaker research project' of the Institute of History of the University of Oslo, which has as one of its objectives the application of micro-historical methods and electronic data processing techniques to social history. The article tries out how far it is possible to reconstruct the migration patterns of a local population by detailed study of place-of-birth data in a nominative population census, and examines especially the relationship between balanced local population exchange ("circles") and the flow of people toward the capital Christiania. The latter of movement is proved to be dominated by men.
- MOOK, Reinhard. 178
 Flyttinger i Nord-Norge etter 1950 (Migration in Northern Norway after 1950). Bodø, Studieselskapet for Nord-Norsk Næringsliv, skrift No. 35, 1967. 325 pp. + map.
 Based on public statistics, migration to and from each North Norwegian Municipality in the period 1950 to 1964 is reviewed and commented in the light of other demographic variables. Detailed studies on the scale of the smallest units of census are presented for eight selected socioeconomically different municipalities: Sør-Varanger, Karasjok, Nordkapp, Skjervøy, Tromsø, Sortland, Vestvågøy and Vefsn.
- MOOK, Reinhard. 179
 Flytting og levekår. En undersøkelse i Karasjok (Migration and Living Conditions. A Study in Karasjok). Oslo, Institutt for samfunnsforskning, 1969. 62 pp. + tables. Mimeo.
 This is a compilation of demographic, economic and ethnic data obtained from interviewing households in the Lappish municipality of Karasjok.
- PIHLBLAD, C. T.; and AAS, Dagfinn. 180
 Residential and occupational mobility in an area of rapid industrialization in Norway. American Sociological Review 25(3): 369-375. June, 1960.
 Presentation of a few of the results of a study of field data obtained by the Institute for Sociology, University of Oslo, on the volume of residential and occupational mobility among youth in the Rana region of northern Norway where the Norwegian Government has constructed a steel mill. Analysis by age cohorts.

- REISZ, Bjørn Andresen. 181
 Flytting og levevilkår. Endring i levevilkårene for flyttere i noen flyttestrømmer (Mobility and living conditions. Changes of living conditions for movers in some mobility streams). Arbeidsnotater, 31/76. Oslo, Norsk institutt for by- og regionforskning, 1976. 85 pp.
 The study aims to sum up some general features of the research on living conditions in the Nordic countries. The main post of the study consists of a further analysis of the data of the Norwegian Survey of Migration Motives 1972.
- RØDEVAND, Øivind. 182
 Nordmenn på flyttefot: studier over den geografiske mobilitet innen Norges befolkning i vårt århundre (Norwegians on the move: a study of the geographical mobility of the population of Norway in our century). Oslo, Universitetsforlaget, 1959. 175 pp.
- STATISTISK SENTRALBYRÅ 183
 Flyttingene i Norge 1971 og 1949-1973 (Migration in Norway 1971 and 1949-1973). Statistiske Analyser, No. 13. Oslo, 1975. 63 pp. ISBN 82-537-0453-4. English summary and table titles.
 ... (this publication) presents a survey of the development of migration movements during the period of current registration. Importance has been attached to describe changes in the demographic composition of the migrant groups, and changes in the regional pattern of migration movements during the period.
 "Further, the general picture of the migration movements in 1971 has been particularly stressed. This survey was based on interviews with a sample drawn from a list of persons who were registered as migrants in 1971 and another sample drawn from a register of non-migrants the same year."
- STORDAHL, Erik. 184
 Justerte flytterelasjoner. Arbeidsrapport nr. 2. Analyser av flyttingene i Norge 1971-1974 for grupper av personer og grupper av kommuner (Improving the migration component in the population projection model. Working report, No. 2. Analysis of migration in Norway, 1971-1974, for different groups of population and municipalities). Arbeidsnotater, IO 77/10. Oslo, Statistisk Sentralbyrå, 1977. 164 pp.
- ØSTBY, Lars. 185
 Geografisk mobilitet - En gjennomgåelse av dens teoretiske grunnlag og behandling av flyttingene i Norge 1966-67 (Geographical Mobility - An appraisal of the theoretical basis and analysis of the migration in Norway 1966-67). Hovedoppgave i geografi, Universitetet i Oslo, 1970. Medd.Geogr.inst. Universitetet i Oslo. Kulturgeografisk serie nr. 4 2 vol. 198 pp + appendix.
 The paper contains an annotated bibliography on Norwegian mobility literature up to 1969.
- ØSTBY, Lars. 186
 Hvem flytter i Norge? Tendenser i flyttergruppenes sammensetning etter 1950 (The migrants in Norway. Trends in the composition of the migrant group after 1950). In I forskningsens lys, edited by M. Mortensen, pp. 375-392. Oslo, 1974. Also published in Artikler, No. 73. Oslo, Statistisk Sentralbyrå, 1975. 23 pp. ISBN 82-537-0441-0.
 This paper describes the migrations in Norway based on two very different sources of data. The first part is a description of

mobility and composition of migrant groups during the period 1949-1972. Attention is primarily drawn towards changes that have taken place. The second part is based on the first results of the Survey of Migration Motives 1972, consisting of a description of stated causes of migration, plans for future move, and a comparison of living conditions before and after move.

H.4. Settlement and Resettlement

BROX, Ottar. 187

Avfolkning og lokalsamfunnsutvikling i Nord-Norge (Depopulation and community growth in North Norway). University of Bergen, Dept. of Social Anthropology, Mimeo, 1971. 160 pp.

A comparative analysis of 9 North Norwegian communities with different demographic profiles. Their different ability to keep already established households is explained with reference to differences in local income opportunities, especially with regard to the situation in the fisheries. Differences in the ability to recruit young people and new households is explained with reference to local economic organization, the crucial factor being whether the generally household-organized economy is supplemented with production units employing unattached individuals. The interplay between local (ecological and organizational) and political factors is illustrated and discussed.

BROX, Ottar. 188

Phases in the development of North Norwegian settlement structure. In *The Local in a Wider Context*, edited by S. Saugestad Larsen, pp. 7-17. Mimeographic. University of Tromsø, 1978. ISBN 82-90298-00-5.

It is argued that the recent development of North Norwegian settlement can be divided into 3 phases: 1. Dispersion (ending around 1950), 2. Concentration (1950-1970) and 3. Consolidation (beginning around 1970). These processes is explained with reference to North Norway's integration into the national economic and political administrative systems.

H.5. Temporary Migration

NICHOLSON, Beryl. 189

Tilbakeflytting til et utkantdistrikt (Return migration to a marginal area). *Tidsskrift for Samfunnsforskning* (Oslo) 12(2): 99-122. 1971. English summary.

A study of emigrants from three communes in northern Norway during the post-World War II period who returned to their communes in mid-1965. "The returned migrants are compared with recent emigrants in respect of sex, age at emigration, occupation before and after emigration and migration destination in order to investigate which characteristics are associated with an above or below average propensity to return."

NICHOLSON, Beryl. 190

Return migration to a marginal rural area - an example from North Norway. *Sociologia Ruralis* (Assen, Netherlands) 15(4): 227-244. 1975.

"On the basis of population register data and migration notifications, this study examines return migration to a marginal area which is experiencing a net migration loss. It explores differences between emigrants and return emigrants in age at emigration, occupying in the

home area and elsewhere and migration destination. On the basis of the findings, tentative explanations are suggested for the differences between migrants in propensity to return."

H.6. Rural-Urban Movements

- AUBERT, Vilhelm; and KARLSEN, Gustav. 191
 Flytting fra utkanten (Migration from marginal areas). Tidsskrift for samfunnsforskning (Oslo) 6(3): 182-218. 1965.
- HENRIKSEN, Edgar. 192
 Flukten fra landsbygda; intervjuer og betraktninger (Flights from the rural districts ...). Oslo, H. Aschehoug, 1947. 138 pp.
 Section II presents contributions by various persons on the social, labor, psychological, and cultural aspects of the problem.
- HERSTAD, John. 193
 Folkemengdens bevegelser i Bergen stift 1735-1820. Tall og fakta (Population movements in the diocese of Bergen 1735-1820. Facts and numbers). Bergen, Bergen historiske forenings skrifter, 1969/1970.
 The article tries to give an impression of the regional differences within the diocese of Bergen with a special eye on the differences between the town of Bergen on the one hand and the other deaneries on the other. There are strong indications that migration from the deaneries into Bergen was absolutely necessary to prevent a drastic reduction in the town-population during the period.

I. HISTORICAL DEMOGRAPHY AND DEMOGRAPHIC HISTORY

I.1. General Historical Demography

- DYRVIK, Ståle. 194
 Historical demography in Norway 1660-1881: A short survey. *Scandinavian Economic History Review* (Copenhagen) 20(1): 27-44. 1972.
 This survey of Norwegian population history challenges some traditional views, in particular by emphasizing the secular stagnation in coastal Norway 1650-1750.
- DYRVIK, Ståle; MYKLAND, Knut; and OLDERVOLL, Jan. 195
 The demographic crises in Norway in the 17th and 18th centuries: same data and interpretations. Bergen, Universitetsforlaget, 1976. 48 pp. ISBN 82-00-01627-7. LC 77-351089.
 By means of parish registers 1650-1735 and national vital statistics from 1735 onwards, peaks of mortality are located in time and space. The crises appear in clusters separated by 20-30 years of relative calm. The crises seem to be mainly caused by disease, which is occasionally aggravated by famine.
- HERSTAD, John. 196
 Bispelistene som kilde til eldre norsk befolkningsstatistikk (The bishop' lists as a source to Norwegian population Statistics). *Heimen* (Oslo) 16(3): 609-628 and 16(4): 689-704. 1975.
 The article discusses the information value of the bishops' lists with regard to births, stillbirths, illegitimacy and deaths.
- JUHASZ, Lajos. 197
 Demografiske kriser (Demographic crises). *Heimen* (Trondheim) 12(4): 397-417. 1971.
- SANDNES, Jørn. 198
 Ødetid og gjenreisning. *Trøndsk busetningshistorie ca. 1200-1600* (Desertion and recolonization. The settlement history of Trøndelag ca. 1200-1600). Oslo, Universitetsforlaget, 1971. 386 pp.
 In different chapters of the book the author discusses source material and methods for reconstruction of the number of farms and the size of population in a part of Norway (Trøndelag) ca. 1200-1660.
- SOGNER, Sølvi. 199
 Historical demography in Norway today; sources, literature and the present situation. *Les congrès et colloques de l'Université de Liège*, Vol. 33, 1965. 18 pp.
 Research in the demography of the past was lively in 19th century Norway. Excellent source material dating from the 17th century should allow reviewed interest with new methods.
- SOGNER, Sølvi. 200
 Entwicklung und Stand der Historisch-Demographischen Forschung in Norwegen (Development and state of Norwegian research in historical demography). In *Historische Demographie als Sozialgeschichte*, 1-2. *Forschungen zur hessischen Geschichte*, edited by Arthur Imhof, pp. 1067-1079. Darmstadt und Marburg, 1975.
 Research in historical demography in Norway has been quite lively in the 1960s and 1970s. The subject is taught at university level, research projects are under way, and several family reconstitution studies have been accomplished.

SOGNER, Sølvi.

201

A demographic crisis averted? *Scandinavian Economic History Review* (Odense, Denmark) 24(2): 114-128. 1976.

The author examines the phenomenon of mortality crises when deaths exceeded births in preindustrial societies. She concentrates on a specific aspect, namely births, and on the initial phases of these crises when birth rates tended to drop. The study is based on Norwegian data for the late eighteenth century. The role of administrative measures in averting mortality crises is also examined.

SOGNER, Sølvi.

202

Folkevekst og flytting. En historisk-demografisk studie i 1700-årenes Øst-Norge (Population growth and migration. A historical demographic study of Eastern Norway in the 18th century). Dissertation. Oslo, Norges Almenvitenskapelige Forskningsråd, 1979. 540 pp. ISBN 82-00-01685-4.

The theme of the study is the demographic structure of Norwegian society in the 18th century. Current vital statistics date from 1735. Censuses were held in 1769 and 1801. The intercensal period is the time-limit of the study, Eastern Norway its geographical limits. It is maintained that there is a continuous migration going on from the landlocked interior to the coastal districts. The migration must be seen against the background of a mortality pattern that is very different in the two areas. Mortality on the coast is high, and a need is created for in-migrants in order to allow for population increase, indeed to keep numbers at a steady level. In the interior, on the other hand, mortality levels are low, and natural increase subsequently considerable - there are out-migrants to spare. The economic context within which the population growth takes place, has not received special treatment. But it is common knowledge that the Norwegian economy was generally expanding in the 18th century, above all in cities and along the coast, focusing on the timber trade, iron and glass production, shipping and urban trades generally. The expansion in agriculture is beyond doubt, but cannot compare with these other activities. Still, if economic growth may be reflected by population growth, expansion is evenly divided between the two areas analysed: Both increase their population by about 20 per cent. The new economic life can be profitably exploited almost anywhere. It may therefore seem as if the demographic aspect is more important as a "pull" factor than the economic aspect. A parish family reconstitution was carried out to support the study of the diocese, which it did.

One important finding of the study is two demographic patterns existing simultaneously within the same region, characterized by high birth and death rates and low birth and death rates respectively. Though the vital rates seem to balance each other within each of the two systems, they nevertheless result in widely differing growth rates - the low rate district increasing quickly, the high rate district barely keeping up its numbers. Differential mortality is the independent variable causing the differing growth patterns. Migration is the compensating factor, the regulating mechanism that allows the necessary stabilization of the two systems. Migration is ever-present as an outlet, as part of the individuals reservoir of life-saving remedies. Migrations secures even population growth and normal age/sex structure all over the area. It is a self-sufficient migration area, balancing in itself.

- SOGNER, Sølvi. 203
 Norwegian Burial-Sermons as Source for Historical Demography. In *Leichen-predigten als Quelle Historischer Wissenschaften*, edited by Rudolf Lenz, Band 2, pp. 59-73. Marnburg, A. D. Jahn, 1979. ISBN-3-88421-001-7.
 Printed burial sermons are rarer in Norway than in other Protestant countries. Such as exist data mainly from the 17th century. They give valuable information on demographic phenomena as well as on attitudes towards death. Fertility may be assessed from sermons on women. Fertility seems higher for the upper strata - with which the sermons are concerned - than for the rural population of the following century, for whom parish records can give information.
- I.2. Methods of Historical Demography
- DYRVIK, Ståle. 204
 Studiet av befolkningshistoria på 1900-tallet (The study of population history in the 20th century). In *Lokalsamfunnet under omstøpning*, edited by R. Fladby and H. Winge, pp 9-27. Oslo, Cappelen, 1977. ISBN 82-02-03610-0.
 Problems facing the demographic historian working on local source material from the 20th century.
- DYRVIK, Ståle. 205
 Demografiske modeller i eldre norsk befolkningshistorie (Demographic models in early Norwegian population history). *Historisk tidsskrift* (Oslo) 57(4): 382-394. 1978.
 By keeping the growth rate and the marital fertility constant, four different levels of mortality are counter-balanced with corresponding marriage patterns. The consequences of the four models are studied in regard to household structure and household size, the latter being the crucial element in estimations of the Norwegian medieval population.
- LUNDEN, Kåre. 206
 Four methods of estimating the population of a Norwegian district on the eve of the Black Death, 1349-1350. *The Scandinavian Economic History Review* (Copenhagen) 16(1):1-18. 1968.
 The sources to the medieval demography of Norway being very meagre, the purpose of this paper is to study the degree of correlation between population estimates obtained by four different and highly independent methods. Method No. 1 is based on a counting of medieval farms and holdings. Method no. 2 is a probability estimate, based on the number of farms and holdings with names of certain types being mentioned in the medieval sources. Method No. 4 and 5 are based on estimates of medieval agricultural production. The population figures for the district vary between about 3 800 and 5 200, according to the four different methods.
- SANDNES, Jørn. 207
 Er manntallet for tiendpenningskatten 1520 (-21) fullstendig? (Is the tenth penny tax list 1520-21 complete?). *Heimen* (Oslo) XII: 253-257. 1962.
 Deals with the Norwegian tax lists from 1520-21 and the question how complete they are as a basis for reconstruction of the number of farms and the size of population at that time.

- SANDNES, Jørn. 208
 Garder, bruk og folketall i Norge i høymiddelalderen (Farms, holdings and population size in Norway in the High Middle Ages). Historisk Tidsskrift (Oslo) 47(4): 261-292. 1968.
 Discusses the methods for reconstructing the number of farms and family holdings in Norway in the High Middle Ages. On this basis the author also tries to estimate the size of population. Tentative results: 33 880 farms, 51 079 holdings, and a population size of about 360 000.
- SOGNER, Sølvi. 209
 Sosial og geografisk mobilitet (Social and geographical mobility). In Nordisk Lokalhistorie, edited by J. Kuusanmäki og J. Lindgren, pp. 144-160. Møtesrapport 2, Viitasaari, Aug. 9-12, 1976. Helsinki, Paikallishistoriallinen toimisto r.y., 1978. ISBN 951-95252-2-X.
 A discussion of sources and methods when assessing mobility in family reconstitution studies.
- SOGNER, Sølvi. 210
 Nature and dynamics of crises (including recent crises in developing countries). In The great mortalities: Methodological studies of demographic crises in the past, edited by Hubert Charbonneau and André Larose, pp. 311-331. Liège, IUSSP, 1979. ISBN 2-87040-015-2.
 The article discusses analytic problems of mortality crises - size of unit of observation, time period of observation, typology of crises, present problems.

J. CHARACTERISTICS

J.1. General Demographic Characteristics

RAMSØY, Natalie Rogoff. 211

A note on the three age cohorts in the Norwegian life history survey. The Occupational History Study. Working memorandum, No. 2. Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1972. 13 pp.

Contains a brief examination of public statistics (vital statistics and census data) for information concerning the three birth cohorts represented in the Occupational History Study. Covers mainly mortality statistics and geographical distributions at various time points in the period covered by the study.

SØRENSEN, Annemette. 212

Fragmenter af norske kvinders livsløb (The life cycle of women: Fragments from the life histories of Norwegian female birth cohorts). The Occupational History Project. Working memorandum, No. 20. Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1978. 24 pp.

Census data and vital statistics from the period 1920 to 1970 are used to describe the aggregated life histories of female birth cohorts 1901-50 (in ten year groups) in important areas of life: Marriage (marital status and marital activity by age), participation in the labour force and death rates.

J.2. Biological Characteristics

BRUNDTLAND, Gro Harlem; and WALLØE, Lars. 213

Menarcheal age in Norway in the 19th century: A re-evaluation of the historical sources. *Annals of Human Biology* (London) 3(4): 363-374. 1976. German and French summaries.

The authors challenge the hypotheses that the well-documented linear fall in the age of menarche which occurred over the last 50 years can be extended to the middle of the nineteenth century using Norwegian historical sources.

J.4. Social Characteristics

MØGLESTUE, Idar. 214

Befolkningens utdanningsbakgrunn: en analyse av tall fra folketelling 1970 (Educational background of the population: An analysis of data from the 1970 population census). Artikler, No. 79. Oslo, Statistisk Sentralbyrå, 1975. 89 pp. ISBN 82-537-0532-8. English title, preface, table of contents, and summary.

The author surveys the education of the Norwegian population aged 16 years and older, using data given in the volume on education from the 1970 population census. Sections are included on the following topics: a comparison of trends in educational status from 1950 to 1970; age and education, including differences between generations in level and type of education; educational differences between sexes; the relation between education and such factors as marital status, age at marriage, and number

at marriage, and number of children; and education in relation to place of residence, including analysis of factors which affect educational levels in different areas, such as rate of urbanization, industrial structure, and proximity to service centers.

- RAMSØY, Natalie Rogoff. 215
 Social mobility and changes in the economy. The Occupational History Study. Working memorandum, No. 15. Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1977. 25 pp.
 Intergenerational social mobility is related to the socioeconomic order. The possibilities for intergenerational social mobility is dependent upon changes and openness in the occupational structure and the amount of ownerships and property relations of firm and farms.
- RAMSØY, Natalie Rogoff. 216
 Sosial mobilitet i Norge. En studie i endring av levekår og sosial status basert på livshistorier til 3 400 norske menn (Social mobility in Norway. A study of change in levels of living and social status, based on the life histories of 3 400 Norwegian men). Oslo, Tiden Norsk forlag A/S, 1977. 261 pp. ISBN 82-10-01366-1.
 Analyses the intergenerational and intragenerational social mobility in Norway in the period covered by the data from the Norwegian Occupational History Study, in relation to the overall changes in the occupational structure and the general social and economic conditions in the same period.
- RAMSØY, Natalie Rogoff. 217
 Do the well-educated still defer gratifications? The Occupational History Study. Working memorandum, No. 17. Oslo, INAS (institutt for anvendt sosialvitenskapelig forskning), 1978. 65 pp.
 Discusses a frame for studying social stratification and mobility in relation to the timing and the sequence of events in the life cycle. The theoretical concept of delayed gratification is used as an example of these types of linkages. Empirical analysis of the inter-cohort variation and intra cohort change in marital age and pre-marital conception. Educational attainment and early occupational history are used as explanatory variables in the analysis.
- SKREDE, Kari. 218
 Sosial bakgrunn og oppvekstforhold. En sammenlikning av de tre årskullene i Yrkeshistorieundersøkelsen (Childhood and adolescence - variation and change. A comparison of the three birth cohorts in the Occupational History Study). Yrkeshistorieprosjektet. Arbeidsnotat, No. 5. Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1973. 103 pp.
 Examines the variation and change in social conditions in childhood and adolescence (parents' occupation and education, number of siblings, respondents' own judgement of the economy of their family of origin) for the three cohorts in the Occupational History Study. Census data and vital statistics from the period in focus are used to check the representativeness of the cohort samples with respect to the original birth cohorts.
- SKREDE, Kari. 219
 Levekår og livssjanser (Level of living and life chances). Plan og arbeid (Oslo), No. 6, 1974. Pp. 233-237.

Short description of the design and purpose of the Norwegian Occupational History Study. Gives some preliminary results of analysis with respect to the effects of social background on life chances in important areas of life, like educational attainment, income development with age, and the risks of getting seriously ill or unemployed during specific intervals of age.

SKREDE, Kari.

220

Livssyklus, sosial likhet og sosial endring. Hovedaktivitet og bosted (Life cycle variations, social equality and social change. Main activity and geographical residence). Yrkeshistorieprosjektet. Arbeidsnotat, No. 9. Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning). 1976. 143 pp.

Contains Chapters 1 and 2 in the general, descriptive report from the Occupational History Study.

Ch. 1. Main activity: Describes the variation in time allocation to various activities and in mobility between activities and statuses with respect to:

- a) age within each of the cohorts (life cycle pattern)
- b) between the cohorts by comparison of the age-related time use profiles and mobility patterns, thus indicating the amount of change/stability over time in the aggregated life-cycle patterns
- c) within each of the cohorts with respect to:
 - i) socioeconomic status of father's occupation at son's birth
 - ii) socioeconomic status of respondent's own occupation at the time of the interview
 - iii) residence at birth (type of municipality)
 - iv) residence at time for interview (type of municipality)

Ch. 2. Geographical residence: Describes variations in geographical mobility and residential location (region and type of municipality). Description structured as a) - c) in Chapter 1 - see description above.

STINCHCOMBE, Arthur L.

221

Generation and cohorts in social mobility: Economic development and social mobility in Norway. The Occupational History Study. Working memorandum, No. 18. Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1978. 35 pp.

Examines the amount of intergenerational social mobility in the three male cohorts in the Norwegian Occupational History Study, taking into account the social (occupational) composition of the fathers with sons born the given years (1921, 1931 and 1941), and the relation between the labour market composition when the sons are attaining the composition of a cohort of sons. The former involves accounting for a) the relation of married men at the age to be others to the male labour force as a whole, b) the differential fertility by occupation of potential fathers, and c) the different age distributions of the fertility (timing of children) of fathers in different occupations.

STINCHCOMBE, Arthur L.

222

Social mobility in industrial labor markets. The Occupational History Study. Working memorandum; No. 19. Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1978. 46 pp.

Analyses the partition of the labor market into segments, and the effects of this partition on the process of social mobility. By labor market segments is understood bounded areas within the labor market, such that people within those boundaries do not compete with the people outside to more than a limited extent.

J.5. Ethnic characteristics

AUBERT, Vilhelm. 223

Den samiske befolkning i Nord-Norge (The lappish population in northern Norway). Artikler, No. 107. Oslo, Statistisk Sentralbyrå, 1978. 139 pp. ISBN 82-537-0843-2. English preface, table of contents, table titles, and summary; and Lappish summary.

The author uses data from a survey carried out in connection with the 1970 census concerning the Lappish population in northern Norway. He attempts to define the Lappish population and describe its basic demographic and social characteristics. He then compares it to population of the region as a whole.

THORSEN, Hanne Christine. 224

Registreringen av den samiske befolkning i Nord-Norge fra 1845 til 1970 (Registration of the Lappish population in northern Norway 1845 to 1970). Oslo, Institutt for samfunnsforskning, Avdeling for sosiologi, 1972. Various pag.

An evaluation of the various sources for registration of the Lappish population, with emphasis on the population censuses, and a description of the settlement pattern in Lebesby.

K. DEMOGRAPHIC AND ECONOMIC INTERRELATIONS AND NATURAL RESOURCES

K.1. Economic Development and Population

- HAAVELMO, Trygve. 225
 Økonomiske langtidstendenser (Economic long-range trends). Notes from lectures given in 1949, edited by Arne Amundsen. Memorandum 17/2. Oslo, Sosialøkonomisk institutt, 1950. 29 pp.
 Includes a chapter (I) on Malthus' theory of population growth. Discusses in particular the realism of the theory of production implied by Malthus' two main postulates and draws attention to consequences of modifying that theory.
- HAAVELMO, Trygve. 226
 A study in the theory of economic evolution. Amsterdam, North-Holland Publishing Company, 1954. 114 pp.
 Contains microeconomic models where population is treated as an endogenous variable.
- HAAVELMO, Trygve. 227
 On the dynamics of global economic inequality. Memorandum from Institute of Economics 7/5. Oslo, Universitetet i Oslo, 1980. 10 pp.
 A study of the evolution of distribution using certain ideas of Darwinistic selection.
- RØDSETH, T. 228
 Befolkningsutviklingen og de økonomiske problemer den reiser (Population growth and the economic problems it raises). Økonomi (Oslo), Nov. 1955. Pp. 3-74.
 Population growth in Norway since 1750 and its influence on production and political economy. The present situation with regard to the Norwegian labour market.
- THONSTAD, Tore. 229
 Sammenhenger mellom folketall, "terms of trade" og levestandard (Relationship between population size, "terms of trade" and living standards). Statsøkonomisk Tidsskrift (Oslo) 84(3): 111-138. 1970.
 Economic models of international trade applied to study impact upon terms of trade and living standards in a country of population growth at home and in other countries (trading partners). It is explicitly taken into account that population growth affects consumer demand through impacts upon income capita and through the increase in the number of consumers. It is also taken into account that population growth may affect savings and capital accumulation. Among results are that population growth in agrarian countries may increase the relative price of agricultural products, stimulate investments in these countries and reduce investments in industrial countries.

K.2. Population Growth and Natural Resources

DYRVIK, Ståle; et al. 230

Poteta og folkeveksten i Noreg etter 1815: Fire debattinnlegg (Influence of the growing of potatoes on population development in Norway after 1815: Four contributions to the discussion). Historisk tidskrift (Oslo) 57(3): 251-299. 1978.

- I. HOVLAND, Edgar. Jordbruksproduksjon, kornimport og mattilgang 1723-1855 (Agricultural production, grain import and the supply of food). 17 pp.
- II. DYRVIK, Ståle. Poteta, dødsrata og demografien. (The potato, the deathrate and demography). 11 pp.
- III. TEIGEN, Håvard. Potet, alternativ kostnad og kontrafaktisk metode (Potato, alternative cost and the "kontrafaktisk" metode). 10 pp.
- IV. LUNDEN, Kåre. Potetkommentar (Comments on potatoes). 10 pp.

A discussion following Kåre Lunden's article from 1975 on the nutritional and demographic effects of the introduction of the potato in Norwegian agriculture in the early 19th century.

LUNDEN, Kåre. 231

Potetdyrkinga og den raskare folketalsvoksteren i Noreg frå 1815 (The tilling of potatoes and the increased population growth in Norway from 1815). Historisk Tidsskrift (Oslo) 54(4): 275-315. 1975. Summary in English.

The problem of the paper is the explanation of the demographic transition in Norway from about 1815. The paper tests the hypothesis that the tilling of potatoes can explain the falling death rate in the period 1815-65.

First the supply of energy and protein from domestic agriculture and import of cereals was calculated, on the basis of official statistics, at 1723, 1809, 1835, 1845, 1855 and 1865. The supply of energy per capita per dian was 1425 kcal in 1723, rising to 1804 kcal in 1809 and further to 3317 in 1865. This development fits the hypothesis that the supply of energy was a critical factor. - The supply of protein was fairly good during the whole period. - However, the contribution to the whole increase in energy production for the period 1809-65, of the differential value of potatoes over barley, was only 18 per cent. This implication was pointed out: "If the assumption is that the whole fall in mortality in the period 1809-65 was due to the increase of energy production in agriculture, then the causes of that fall can be specified as follows (...): 18 per cent was an effect of growing potatoes instead of barley on the potato acreage of 1865, 40 per cent was an effect of increased growing of cereals, 27 per cent was an effect of increased animal production, and the "rest" of 15 per cent was an unspecified effect of increased cultivated fields, not included in the other items."

LUNDEN, Kåre. 232

Poteter og folketal (Potatoes and population). Historisk Tidsskrift (Oslo) 56(2): 207-220. 1977.

The paper is a continuation of the discussion about the connection between the tilling of potatoes and the demographic transition in Norway, following criticism by Hovard Teigen (1976). The purpose is to vindicate procedures and results from Lunden 1975.

- MOE, Thorvald. 233
Demographic developments and economic growth in Norway, 1740-1940: an econometric study. Dissertations in European Economic History. New York, Arno Press, 1977. xi, 250 pp. ISBN 0-405-10802-8. LC 77-77190.
This is the published version of a Ph.D. thesis submitted to Stanford University in 1970. The author sets up a series of hypotheses regarding economic-demographic interactions in the form of simple aggregate models, and subjects them to statistical tests using methods recently developed by economic historians. The focus of the study is on the economic impact of demographic development in Norway before 1940. In Chapter 2, the author considers long-term economic and demographic swings. Chapter 3 presents an econometric analysis of the determinants of births and marriages in Norway before 1865; Chapter 4 describes the massive emigration that occurred after 1865. In chapter 5, the author examines the economic and demographic causes of Norwegian labour emigration using an econometric model based on permanent income theories.
- NORDERHAUG, Ann; and NORDERHAUG, Magnar. 234
Norge og overbefolkningen (Norway and overpopulation). Ugle-bøkene, 110, Oslo, Cappelen, 1974. 175 pp. ISBN 82-02-03093-5 LC 74-357595.
The population problem is discussed within a framework of biological and ecological knowledge. It is an attempt to evaluate the mutual dependency of population development, natural resources, environmental problems and the material standard of living.
- TEIGEN, Håvard. 235
Poteta og folkeveksten i Noreg 1815-1865 (The potato and the growth of population in Norway 1815-1865). Historisk tidsskrift 55(4): 438-451. 1976.

K.3. Employment and Labour Force Participation

- BENDIKSEN, Bjørnulf. 236
Enkelte trekk ved endringene i yrkesstrukturen i Norge sett i lys av de siste folketellingene (Some notes on the changing occupational structure in Norway in light of the census). Statsøkonomisk Tidsskrift (Oslo), Oct. 1952. Pp. 221-228.
Comparison of the occupational distribution of the population in 1920, 1930, 1946 and 1950.
- HAGEN, Vivi; and SKREDE, Kari. 237
Gifte kvinner, familiefase og yrkesaktivitet (Married women, phase of family cycle, and labour force participation). Arbeidsrapport, No 22. Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1976. 175 pp.
Analysis the variation in labour force participation among married women in different phases of life/family cycle (Data: Information about the spouses of the respondents in the Occupational History Study, both with reference to the time of the interview and to the period between the marriage and the time of the interviewer). The variation in labour force participation is analysed with respect to factors like the womens' age (birth year), educational attainment, the number of children and their age (phase of family cycle, educational attainment, socio-economic status and income of husband, and the type of municipality at the time of the interview).

- HANSEN, Jens Chr. 238
 Industriell utvikling og tettstedsvekst. Norske eksempler (Industrial development and urban growth. Norwegian examples). Norsk Geografisk Tidsskrift (Oslo) 20(6-7): 181-265. 1966. English summary.
 Characteristic growth patterns are studied in an historical context for 55 industrial settlements dependent upon different branches of industry, and in more detail for 6 settlements. In conclusion, demographic characteristics of the 1950s are described.
- LETTENSTRØM, Gerd Skoe. 239
 Kvinners yrkesdeltaking (Female economic activity). Sosialt Arbeid (Oslo) 39(3): 89-91. 1965.
 The topic of this article is changes in the female active population in Norway from 1875 to 1960, based on population census data. Special interest is paid to the decrease from 1946 to 1960, and changes in age structure, marriage pattern etc. have been analysed.
- LETTENSTRØM, Gerd Skoe; and SKANCKE, Gisle. 240
 De yrkesaktive i Norge 1865-1960 og prognoser for utviklingen fram til 1970 (The economically active population in Norway 1875-1960 and forecasts up to 1970). Artikler, No. 10. Oslo, Statistisk Sentralbyrå, 1964. 56 pp.
 In this article changes in size and structure of the economically active population in Norway have been studied on the basis of population census data from 1875 to 1950. Considerable interest is attached to the period 1950-1960 because of the slow increase, and estimates are made as to the effects of the various factors, such as changes in age structure, marital status, etc.
- LJONES, Olav. 241
 Kvinners yrkesdeltaking i Norge (Female labour activity in Norway). Samfunnsøkonomiske Studier, No. 39. Oslo, Statistisk Sentralbyrå, 1979. 162 pp. ISBN 82-537-0961-7. English summary and table titles.
 This report concerns different aspects of female employment in Norway. The analysis is divided into two separate parts, the first part gives a general description of female labour activity in Norway. Part two presents a theoretical model for married women's labour supply. Using a regression model factors influencing labour force participation are analysed. The explanatory variables in the model are; number of children below 16 years of age and age of youngest child, age of wife, education completed of wife, (level and field of study), education completed of husband (level), husband's labour force participation and occupation, and local labour market index (indicator for how well the industry mix in residential municipality is suited for female employment. We see that labour force participation for married women depends heavily on the presence of young children in the household. The labour force participation increases sharply with increasing age of the youngest child.

- RASMUSSEN, Tor Fr. 242
 Yrkesbefolkningen i Norge (The economically active population in Norway). Artikler, No. 76. Oslo, Statistisk Sentralbyrå, 1975. 95 pp. English title, preface, table of contents, and summary.
 Includes data on trends in total, sex- and age-specific, and regional economic activity, and economic activity by industrial sector, based on statistics from the 1960 and 1970 censuses. Compares Norwegian and Swedish economic activity in 1970 and gives projections for 1980 and 1990. Discusses methodological differences between the 1960 and 1970 censuses and presents some observations on the type of statistics needed for labour market surveys.
- THONSTAD, Tore. 243
 Education and manpower. Theoretical models and empirical applications, Report No. 4 of the Unit for Economic and Statistical Studies on Higher Education, The London School of Economics and Political Science, Edinburgh and London, Oliver and Voyd, 1969. 162 pp. ISBN 05-001672-5.
 This book presents a flow model of the entire Norwegian educational system, and analyses a number of structural characteristics of the system, applying Markov Chain theory. The model has much in common with demographic models, and contains assumptions about e.g. mortality. Another set of static and dynamic models are employed in deriving educational requirements in order to satisfy given manpower targets. Among the data of the models are estimates of mortality and of labour force participation of different types of educated manpower.
- YRKESHISTORIEPROSJEKTET. (Norwegian Occupational History Study) 244
 Retrospective study of the life and occupational histories of samples of men born in the years 1921, 1931 and 1941 respectively, carried out by the Institute of Applied Social Research (INAS) in the years 1971-1979.
 The study covers detailed retrospective reports of the mens' statuses and activities in major areas of life from the age fourteen up to the time of the interview (end of 1971). The areas covered are occupational history, education, family and household composition, marital status, children, municipality and subregion of the municipality, major illness and yearly income, the latter given for specific years on a 5-year interval basis. Apart from income, all the events (statuses and activities) are registered with reference to starting and ending year and month, provided the events lasted at least one month.
 In addition to the retrospective data, the study also gives information about family and social background at birth and a fairly detailed interview with reference to the time of the interview. The latter covers occupational characteristics, working conditions and job environment, some questions concerning other aspects of the level of living, and, in addition, for married respondents, information about their wives' education and participation in the labour force.
 The Central Bureau of Statistics was responsible for the sampling and the interviewing for the study. Complete bibliography and short description of the study is forthcoming as working memorandum from INAS, autumn 1980. Complete description of the data and the data structure is given in working memorandum No. 16. The Occupational History Study, Oslo, INAS, 1980.

L. DEMOGRAPHIC AND NON-ECONOMIC INTERRELATIONS

L.1. General Social Development and Population

- BROX, Ottar. 245
 Newfoundland fishermen in the age of industry. A sociology of economic dualism. St. John's Newfoundland, Canada. Memorial University, 1972. (Mimeo. edition 1969) 114 pp.
 An attempt to explain the apparent economic stagnation and demographic "immobility" of the rural population of Newfoundland. Starting out with an analysis of household economy, the author maintains that rural people's rejection of new economic opportunities, as well as their unanticipated use of resettlement subsidies, can be explained as rational adaptation. The analyses is partly comparative, utilizing research done in other coastal areas around the Northern North Atlantic.

- VÆRNESS, Kari. 246
 Demografiske endringer og utgifter i helse- og sosialsektoren (Demographic changes and expences in public health care and social security). In *Norges befolkning*, edited by Ståle Dyrvik and C.J. O'Neill, pp. 57-77. Oslo, Cappelen, 1975. ISBN 82-0203168-0.
 The growing demand of health care and social services are important consequences of the increasing number of elderly in the population. At the same time a changing settlement pattern leads to decreasing numbers of elderly living within a reasonable distance from own children. In the years to come the demand of public health and social services will therefore increase.

L.3. Demographic Factors and Health

- SAUGSTAD, Letten F. 247
 Inbreeding in Norway. *Annals of Human Genetics* (London) 40(4): 481-491. 1977.
 The author examines the reliability of marriage certificates, the 1891 census, and the Medical Registration of Births as indicators of inbreeding in Norway. Past trends and present levels of inbreeding are discussed.

- SAUGSTAD, Letten F. 248
 The relationship between inbreeding, migration and population density in Norway. *Annals of Human Genetics* (London) 40(3): 331-341. Jan. 1977.
 The author investigates the relationship between present levels of inbreeding and the proportion of nonmigrants (residents in municipality of birth) in rural districts of Norway. The correlation between inbreeding and population density is also examined.

- SKREDE, Kari. 249
 Livssyklus, sosial likhet og sosial endring. Yrkesaktivitet og sykkelighet (Life cycle variation, social equality and social change. Occupation and illness). Yrkeshistorieprosjektet. Arbeidsnotat, No. 11. Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1976. 157 pp.
 Contains chapters 4 and 8 in the general, descriptive report from the Occupational History Study.

Ch. 4. Occupation: Describes variation in occupational activity/mobility, occupational structure and in time allocation to various occupational activities. Description structured as a)-c) in chapter 1 - see no. 220.

Ch. 8. Illness: Describes variation in incidence and average duration of serious illness and accidental injuries. (Restricted to illness and injuries that caused at least one month disability of work. Description structured as a)-c) in chapter 1 - see no. 220.

M. POLICIES

M.1. General Population Policy and Legislation

BOE, Erik. 250

Distriktenes utbyggingsfond - En kritisk rettslig/rettssosiologisk studie av DUF's generelle forvaltningsrettslige stilling (The norwegian development fund for marginal regions - A critical study in law and sociology of law regarding general aspects of the administrative position of the fund). Oslo, Tanum-Norli, 1979. 592 pp. ISBN 82-518-0897-9.

The financial and economic aid to marginal regions in Norway is in this book studied with methods from law science and sociology of law. What is the discretionary power of the development fund, and how is it exercised? In order to stimulate a scientific approach availing both law aspects and theories, methods and problems of sociology, the book illustrates how it may be done in law science. One of the main results is that the rule of law has been replaced with wide discretionary power and an attitude freed from "undue legalism". The development fund seems to aim towards industrial plants located in growing points, especially expanding branches with high technology and less employment. The social and ecological consequences are in comparison of minor importance according to the material presented in the book.

HAAVELMO, Trygve. 251

Variasjoner over et tema av Gossen (Variations over a theme by Gossen). Memorandum from Institute of Economics. Oslo, Universitetet i Oslo, 1972. 106 pp.

In the last chapter (VI) there is a discussion of information as an instrument for population policy.

NILSEN, Kåre Halvdan. 252

Det norske Arbeiderparti og befolkningsspørsmålet i mellomkrigstida 1918-1939 (The Norwegian Labour Party and the population question 1918-1939). Historisk tidsskrift (Oslo) 58(3): 287-304. 1979. English summary.

The article discuss the attitude of the Norwegian Labour Party to the population question in 1918-39. The main question is why the Labour Party changed their attitude on the population question in 1935, and the result of the change.

M.3. Measures Affecting Movement of Population

BROX, Ottar. 253

Hva skjer i Nord-Norge. En studie av norsk utkantpolitikk (What goes on in North Norway? A study of Norwegian periphery policy.) Oslo, Pax Forlag 1966. 205 pp. ISBN 82 530 0484 2.

A study of the effect of the North Norway Plan of 1952 upon the local economy of rural areas, migration processes and the distribution of power. The analysis is based upon the specific changes taking place in rural household adaptation through measures aimed at stimulating the economic expansion of commercial enterprises.

The last part of the book is an attempt to outline an alternative plan, aimed at stimulating the rural economy, the combination of occupations and local resources utilization.

BROX, Ottar. 254

Local and political conditions for the maintenance of marginal communities. In Ecological problems of the Circumpolar Area, edited by Erik Bylund, pp.245-255. Luleå, Norrbottens Museum, 1974.

(Norwegian, Swedish and German versions printed in various collections.)

Utilizing the concept of career, the author sets about to develop a general process model for the study of community viability. The model is composed from the variables, evaluational, situational and cognitive, which govern the course of careers. - The usefulness of the model is demonstrated through the analysis of data from coastal areas around the Northern Atlantic.

BROX, Ottar. 255

Nord-Norge i etterkrigstida (North Norway after the war). In Trekk fra Nord-Norges historie, edited by E. Niemi, pp. 73-93. Oslo, 1976. ISBN 82-05-07957-9.

Changes in the settlement pattern of North Norway 1945-1975 is explained with reference to changes in economic organization, administrative development and attempts at central planning.

BROX, Ottar. 256

Mot et konsolidert busettingsmønster? (Towards a consolidated settlement pattern?) Tidsskrift for Samfunnsforskning (Oslo) 21(3-4): 227-244. Aug. 1980. English summary.

In this article, some of the main hypotheses of the project "Regional Integration Processes in Northern Norway" are discussed. This project is directed by the author in connection with the post graduate programme in social sciences at the University of Tromsø.

The starting point of the analysis is the apparent culmination of the concentration and depopulation process that has been going on through most of the postwar years.

The general explanation of these changes is that local communities no longer are as critically dependent upon their own natural and organizational resources. Through the construction of communications, motorizing and commuting, social benefits and the development of a decentralized service economy, the sparsely populated areas are being integrated into the nationwide society in a new and different sense.

This development is also discussed in relation to some of the conclusions drawn by political and administrative scientists on the distribution of power in Norway, especially as regards the weak position of the coordinating offices in relation to sectorial pressure groups. Such properties of the political/administrative system may help to explain both the turnaround trend in the distribution of population, - and the apparent problems involved in basing public planning and implementation on a consolidated settlement pattern.

HANSEN, Jens Chr. 257

De ensidige industristeder og deres plass i bosettingsmønsteret ("One company town" and their place in the settlement pattern). Plan og Arbeid (Oslo) 1967 (1): 18-25, (2): 16-20.

A study of population development in a sample of Norwegian industrial settlements, as a result of industrial location decisions over time. The study discusses characteristic problems of such settlements caused by skewed age and sex and sex distributions.

HANSEN, Jens Chr.

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Næringsliv og bosetting i Norge - perspektiver og planleggingsproblemer (Economic activity and settlement patterns in Norway - perspectives and planning problems). *Bedriftsøkonomen* (Oslo) 1971(4): 186-193.

Key words describing recent changes in the Norwegian settlement patterns are contraction in marginal areas, local and regional concentration, and suburban sprawl. The thinning-out of settlement in marginal areas is due to structural changes in an economy dominated by primary activities. It has been a serious problem to find alternative jobs in the sparsely populated and extensive marginal areas, and at present a majority of the 449 Norwegian communes are losing population.

Central Bureau of Statistics has published a population projection to 1990, based on demographic observations from the years 1966-1968. In the political debate, it has been contended that this projection shows a negative trend which must be changed by a regional policy conducive to the strengthening of the economy of the marginal areas.

The observed changes in the marginal areas in the period 1965-1970 have, however, been far more critical than the projection's provisions. The depopulation of marginal areas seems to accelerate, and the extent of marginal areas seems to grow, despite the political incentives.

The paper argues that this trend is so unambiguous that a reformulation of regional policies is due, accepting the concentration process, based on a fairly limited numbers of centers with self-sustaining growth.

HANSEN, Jens Chr.

259

The one-company town in Norway. Can we learn from the recent past in planning for the near future? *Norsk Geografisk Tidsskrift* (Oslo) 32(3): 97-110. 1978.

"Features in the growth - and decline, if so - of industrial settlements in Norway are discussed. The notion of a time lag between maximum industrial employment, maximum service employment, and maximum total population is developed, dealing with the 1970 status of a sample of 156 industrial settlements and their development 1950-1970. Cases of decline in both total population, working population, and employment in manufacturing industries prove the need for strategy for the old settlements as well as for the new ones. Three main strategies are advocated: 1) Continued expansion where the occupational structure and the geographical situation will permit a diversification of the local economy: 2) Integration of smaller settlements into greater regional labour markets where economic and time distance make such a development possible: 3) A strategy of retreat for the most extreme cases. New development should only be undertaken in areas where a future strategy of retreat would be unlikely. The author tries to convey a feeling that local problems have to be solved as part of a national strategy, but finds that such a strategy does not exist."

HANSEN, Jens Chr.

260

Bosettingsmønster og regionalpolitikk - harmoni eller konflikt (Settlement pattern and regional policy - harmony or conflict?) *Plan og Arbeid* (Oslo) 1979(2): 62-73.

This paper discusses settlement policy and regional policy in post-war Norway on the basis of official documents and with an eye to the public discussion. The aims and goals expressed are confronted with data showing what really happened to the occupational structure, the settlement pattern and the population distribution of Norway since 1945.

SOMMERS, Lawrence M; and GADE, Ole. 261
The spatial impact of Government Decisions on postwar economic change
In North Norway. Annals of the Association of American Geographers
(Washington D.C). 61: 522-536. 1971.

N. METHODS OF RESEARCH AND ANALYSIS INCLUDING MODELS

- GILJE, Eiving; and NORBOTTEN, Svein. 262
 A demographic model for the Norwegian population and its technical characteristics. *Statistisk Tidsskrift* (Stockholm) 8(1): 13-24. 1971. *Arbeidsnotater*, IO 70/9. Oslo, Statistisk Sentralbyrå, 1970. 18 pp.
 "This paper gives the technical characteristics of the model whose demographic characteristics are described in Gilje (1969). The emphasis is on the building of a computer package which it is hoped will eventually form a part of the more complete socio-demographic model system".
- GILJE, Eivind; and YNTEMA, L. 263
 The shifted Hadwiger fertility function. *Skandinavisk Aktuarietidskrift* (1-2): 4-13. 1971.
 "This article looks at various estimators for the parameters in the shifted Hadwiger fertility function (Gilje, 1960 or 1968). The conditions for a good fit in varying fertility situations are given, and it is shown that in certain cases a good fit can be achieved using approximations and a desk calculator. The best fits were however always found using a least squares method which in practice requires a computer for the calculations."
- HANSEN, Jens Chr. 264
 Størrelsen av statistiske primærområder i regional analyse, belyst med eksempler fra Nedre Telemark (Regional analyses and the size of primary statistical areas. Examples from Lower Telemark, Southeast Norway). *Norsk Geografisk Tidsskrift* (Oslo) 24(4): 217-234. 1970.
 "The region studies is an area of sustained urban and suburban growth, but also with marginal fringe areas. Housing data, population census data, and data about residence and place of work are used to show how a regional analysis can be carried out on several geographical levels. The levels are the region (1), communes (10 before, 4 after 1964), census tracts (sample), and matriculated farms (440). Regional analysis with any pretense of taking into consideration demographic and economic conditions should, in the Norwegian context, refine the use of data on the two lower levels. The paper urges the need for more easily available statistical information on these levels."
- HOEM, Jan M. 265
 Point estimation of forces of transition in demographic models. *Journal of the Royal Statistical Society* (London) Ser. B 33(2): 275-289. 1971. Also separately reprinted in 1972 by the University of Oslo, Institute of Economics, as No. 89 of the Reprint Series.
 "Occurrence/Exposure rates are developed as estimators for the forces of transition of a homogeneous, time-continuous Markov process with at most countable state space in the case where the number of such forces is finite. Conditions for consistency and asymptotic normality of the stimators are stated."
- HOEM, Jan M. 266
 On the interpretation of certain vital rates as average of underlying forces of transition. *Theoretical Population Biology* (New York) 2(4): 454-468. 1971.

- HOEM, Jan M. 267
 On the interpretation of maternity function as a probability density. Theoretical Population Biology (New York) 2(3): 319-327. Erratum 3(2): 240. 1972.
- HOEM, Jan M. 268
 On the statistical theory of analytic graduation. Proceedings of the Sixth Berkley Symposium of Mathematical Statistics and Probability, University of California Press, 1972. Pp. 569-600. Artikler, No.49. Oslo, Statistisk Sentralbyrå, 1972. 41 pp. ISBN 82-537-0813-7.
- HOEM, Jan M. 269
 Inhomogeneous Semi-Markov processes, select actuarial tables, and duration dependency in demography. In Population Dynamics, edited by T.N.E. Greville, pp. 251-296. New York, Academic Press, 1972. Lc 72-9741. Artikler, No. 56. Oslo, Statistisk Sentralbyrå, 1973. 54 pp.
- HOEM, Jan M. 270
 Beregninger av befolkningsrater (Estimating demographis rates). Arbeidsnotater, IO 72/22. Oslo, Statistisk Sentralbyrå, 1974. 19 pp.
- HOEM, Jan M. 271
 The statistical theory of demographic rates: a review of current developments. Scandinavian Journal of Statistics (Stockholm) 3(4): 169-179. 1976.
 "This paper describes how, in a natural way, the occurrence/exposure rates appears as perhaps the most important instrument of statistical analysis in a discipline like demography. The empirical rates are interpreted as estimates of underlying theoretical transition intensities, and some of their statistical properties are sketched. The need for substituting alternative estimators for the occurrence/exposure rates in situations with incomplete information is pointed out, and a 'gross flow rate' is given as an example. Curvefitting to sequences of, say, age-specific rates (analytic graduation) is given some attention, and the recent resurgence of interest in nonparametric methods applicable in demography and similar fields is examined."
 Keiding, Niels; Kulokari, Hannu; Natvig, Bent; and Hilden, Jorgen. Discussion of Jan Hoem's paper. Pp 179-183.
 Hoem, Jan M. Reply. Pp. 183-185.
- HOEM, Jan M. 272
 On the optimality of modified minimum chi-square analytic graduation. Scandinavian Journal of Statistics: Theory and Applications (Stockholm) 3: 89-92. 1976.
 "It has been shown previously that the modified minimum chi-square method of analytic graduation of vital rates produces estimators with minimum variance asymptotically as the population size increases. In the present paper, it is shown that these estimators are similarly optimal according to a different criterion, viz., one where one sets up a quadratic form of deviations between the 'true' underlying fertility curve and the graduated curve, and seeks to minimize the mean of the asymptotic distribution of the quadratic form."

- HOEM, Jan M. 273
 A Markov chain model of working life tables. *Scandinavian Actuarial Journal* (Stockholm), No. 1, 1977. Pp. 1-20.
 The author proposes a new method for constructing tables of working life. "The method is based on the theory of Markov chains with continuous time, and it relies on data labor force mobility (gross labor force flows) instead of on data on labor force status like traditional techniques."
- HOEM, Jan M. 274
 Demographic incidence rates. *Theoretical Population Biology* (New York) 14(3): 329-337. Dec. 1978.
 "Demographers commonly interpret incidence rates ..., cumulated over age for a closed cohort, as prevalences of corresponding demographic statuses ... (This paper) offers a mathematical proof that it is correct if and only if there is nondifferential mortality, as well an extension to incidences for events which can happen more than once to an individual. Mortality incidence rates are discussed as well, and some of the evidence that cumulative incidence rates may get absurd values when computed from period data is reviewed."
- HOEM, Jan M.; and BERGE, Erling. 275
 Some problems in Hadwiger fertility graduation. *Scandinavian Actuarial Journal* (Stockholm), 1975. Pp. 129-144.
 A reparametrization of the Hadwiger function for the analytic graduation of fertility curves. Some findings are presented on currently used methods of parameter estimation.
- NORDBOTTEN, Svein. 276
 Individual data files and their utilization in socio-demographic model building in the Norwegian Central Bureau of Statistics. *Review of the International Statistical Institute* (The Hague) 38(2): 193-201. 1970.
 In Norway a common reference system, containing identification numbers, is employed in various administrative and statistical operations where data for each individual at a given moment are registered. These data are systematically centralized at the Central Office of Statistics in a repository of personnel information which thus comprises the complete history of the individuals. These archives are maintained and made automatically available by electronic computer. The events that occur in the life of an individual are considered as outcomes of stochastic processes defined by dynamic micro-models. We attempt to test the existence of these models and to estimate their structure on the basis of the individual data in our archives for a stated period in order to integrate these models in a larger sociodemographic model. ... At the moment, the socio-demographic model is sufficiently advanced only for the analysis and projection of mortality, natality, and migration by sex and age for the 454 communes. The model is operated by two groups of EDP programs: one for estimation and one for projection. (Abridged translation of author's French summary.)

NORDBOTTEN, Svein.

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Personmodeller, personregnskapssystemer og persondataarkiver (Population models, population accounting systems, and individual data banks). Artikler, No. 38. Oslo, Statistisk Sentralbyrå, 1970. 28 pp. English title, preface, contents, and summary.

"This article discusses several types of population models and the needs for data which the construction of such models will generate. It indicates how a population accounting system may be constructed and how individual data integration can be performed within an individual data bank system. Population accounting tables and individual data files are evaluated as to their respective potentials for satisfying the needs of the model builder."

RAMSØY, Natalie Rogoff.

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Life chances and life histories. Remarks on concept and method in the Norwegian Occupational Life Study, The Occupational History Study. Working memorandum, No. 6. Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1973. 18 pp.

Discussion of the concept of life chances with respect to statuses and activities over the life cycle. Some preliminary results of analysis with respect to the effect of social background at birth on life chances in some areas of life (education, income, risks of unemployment and major illnesses) for the three birth cohorts in the Norwegian Occupational History Study.

RAMSØY, Natalie Rogoff.

279

Life histories as time profiles: Experience from the Norwegian Occupational History Study. Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1979. 28 pp.

Discusses the concept of time use profiles as description of life histories, both on individual level and aggregated for a cohort or a subgroup of a cohort. Empirical examples from the Occupational History Study are given.

SVERDRUP, Erling

280

Estimates and test procedures in connection with stochastic models for deaths. Recoveries and Transfers between different States of Health. Skandinavisk Aktuaretidskrift (Uppsala) No. 3-4: 184-211. 1965.

SÆBØ, Hans Viggo.

281

Minifolketellingen 1975 - en metodestudie. (The mini population census 1975 - a methodological study). Arbeidsnotater, IO 77/40. Oslo, Statistisk Sentralbyrå, 1977. 25 pp.

The Mini Population Census 1975 was carried out as a sample survey to find labour market data which might be compared with data from the Population and Building Census 1970. In addition, there was carried out a quality check survey to evaluate the collected data as in 1970.

The Mini Population Census was worked out in another way than the 1970 census. An important difference was that in 1970 enumerators visited all the households, while in 1975 the census questionnaires were mainly distributed and returned by post. The influence at this and other aspects on the results is discussed on the basis of studies of the data quality.

O. THE PRODUCTION OF POPULATION STATISTICS

O.1. General AspectsO.2. Registration of Vital Statistics

BACKER, Julie E. 282

Population statistics and population registration in Norway. Part I. The vital statistics of Norway: an historical review. Population Studies (London) 1(2): 212-226. Sept. 1947. An analysis of the type and volume of statistics available at various times. Part II. Population Studies (London) 2 (3): 318-338. Dec. 1948.

This part of the paper "deals with the legal basis of medicostatistical data, and shows the type of report made by Medical Officers of Health and by private practitioners to the Norwegian Central Statistical Office The system of classifying causes of death is also explained. Other sections deal with hospital and morbidity statistics and statistics obtained from recruiting authorities."

BJERKDAL, Tor; and BAKKETEIG, Leiv. 283

Medisinsk registrering av fødsel i Norge i 5-årsperioden 1967-1971 (Medical registration of births in Norway during the 5-year period 1967-1971). Bergen, University of Bergen, Institute of Hygiene and Social Medicine, 1975. 71 pp.

Births in Norway are registered through a notification system known as the "Medical Registration of Births". This system, introduced in 1967, covers all live births and fetal deaths with a gestational age of 16 weeks or more. It provides information on length of gestation, birth weight, crown-heel length, congenital malformations, and mothers' health during pregnancy, as well as complications and interventions during labour and delivery. The report is an attempt to provide a baseline or source of reference to some aspects of medical registration of births relevant to mothers' health, obstetric services and conditions of the newborns.

GILJE, Eivind; HOEM, Jan M.; and SKAUG, Helge. 284

Registrert og oppgitt flyttedato. En undersøkelse av norske flyttedata for 1967 (Registered and stated date of moving. An investigation of Norwegian migration data for 1967). Arbeidsnotater IB 69/1. Oslo, Statistisk Sentralbyrå, 1969. 9 pp.

"Norwegians are required by law to register a move within 8 days. There can nevertheless be a considerable timelag between the date of registration and the stated date of the move, causing bias in migration statistics. This paper shows, however, that most lags are relatively small with a median of 4 to 5 weeks."

O.3. Population Censuses and Registers

HANSEN, Jens Chr. 285

Folketellingsdata på krets nivå i Norge 1950 og 1960 (Population census data at enumeration district level in Norway 1950 and 1960). Geografiske Studier av Utkantstrøk i Norge, Arbeidsrapport, No. 2. Bergen, Norges Handelshøyskole og Universitetet i Bergen, Geografisk Institutt, 1974. 77 pp.

Demographic, occupational, social and housing data are presented in detail, and problems of the definition and comparability of the areal units are discussed.

KALDAGER, Alf Terje.

286

Koblet folketellingsmateriale fra 1960 og 1970. En brukerveiledning. (Linked data from the Censuses in 1960 and 1970. A user's guide). Meddelelser, Nr. 42. Bergen, Norges Handelshøyskole, Universitetet i Bergen, Geografisk Institutt, 1977. 14 pp.

The guide gives an introduction to the available datas in the databank. It contains information about all Norwegian residents who were counted in both the 1960 and the 1970 Censuses. The datas are presented in tables showing regional and occupational mobility between 1960 and 1970. The tables are given on several regional levels: national, counties, trade districts and municipalities. The paper contains a discription of the databank, but no analysis of the existing datas.

OFSTAD, Kåre.

287

Population statistics and population registration in Norway. Part 3. Population censuses. Population Studies (London) 3(1): 66-75. June, 1949.

The author "describes enumerations of population that have taken place in Norway, comments on the methods by which the results have been obtained and describes the material that has been collected."

SCANDINAVIAN DEMOGRAPHIC SOCIETY

Proceedings of the (first) Scandinavian Demographic Symposium, 14-16 August 1969 in Matinkylä-Espoo, Finland. Scandinavian Population Studies, No. 1. Helsinki, 1969. 87 pp. (Summary of proceedings and texts of papers on five topics: Methods in population forecasts; Teaching and research in demography and the need of demographers; Demographic cooperation in Scandinavia; Migration problems; Demographic models.)

Selected contents:

GILJE, Eivind.

Model for population projections for Norwegian regions. Pp. 22-32.

This paper describes the population projection model (component or cohort-survival) used by the Central Bureau of Statistics of Norway for the Norwegian municipalities. The model takes account of internal migration, but ignores migration to and from abroad (which was relatively insignificant anyway).

HOEM, Jan.

A probabilistic model for primary marital fertility. Pp. 73-86.

SCANDINAVIAN DEMOGRAPHIC SOCIETY

289

The Second Scandinavian Demographic Symposium, 8-10 June 1970 in Hässelby, Sweden. Scandinavian Population Studies, No. 2. Stockholm, 1970. 134 pp. (Summary of proceedings and texts of papers on five topics: The present development of fertility in Scandinavia and its consequences; What can demographers do for developing countries; Migration between and within the Scandinavian countries; Data explosion; Present position and future possibilities with regard to research and training in the field of demography in Scandinavia.)

Selected contents:

LETTENSTRØM, Gerd S.

Fertility trends in Norway since 1960. Pp. 65-68.

The paper deals with the increasing number of births 1962-1969 compared to the decreasing tendency in childbearing after 1964. Also regional variations in fertility are studied. Comparisons with other Scandinavian countries are made.

GILJE, Eivind.

Internal migration in Norway: regression analysis applied to data from Norwegian municipalities. Pp. 99-110.

This paper tries to explain internal migration patterns in Norway in terms of area characteristics (e.g. local income per capita and type of municipality) and personal characteristics (e.g. age and sex). It suggests certain ways of aggregating areas into larger homogeneous migration zones.

POPULATION RESEARCH INSTITUTE

290

Yearbook of population research in Finland, XIII, 1973-1974. Edited by Jarl Lindgren.

Reports presented at the Third Scandinavian Demographic Symposium, 18-20 June 1973 in Tuusula, Finland. Helsinki, (1974). 194 pp.

Selected contents:

LJONES, Olav.

Labour force participation and family situation of married women: aspects of economic theory and some observations from Norway 1971-1972. Pp. 18-28.

TØNNESEN, Bjørn.

Mortality of single and married persons in Norway 1960-1962. Pp. 71-82.

DYRVIK, Ståle.

Infant mortality about 1800. A preliminary exploration into a Norwegian local material. Pp. 125-134.

The declining infant mortality in the parish of Etne 1775-1814 is analysed. The results show a lower mortality among children of cottars than among those of farmers, and some vanishing vestiges of infanticide.

SCANDINAVIAN DEMOGRAPHIC SOCIETY

291

The fertility decline in the Nordic countries. The Fourth Scandinavian Demographic Symposium, 10-12 June 1976 in Rungsted, Denmark. Edited by Otto Andersen. Scandinavian Population Studies, No. 4. Copenhagen, 1978. 163 pp.

Selected contents:

BRUNBORG, Helge; and LETTENSTRØM, Gerd S.

Fertility trends in Norway since 1965. Pp. 55-74.

This paper presents period fertility data and results from calculation of cohort fertility rates. In a separate chapter, the regional variations and their recent trends are dealt with.

The last chapter is an attempt to discuss some of the social, economic and demographic interrelationships underlying the postwar fertility changes.

SCANDINAVIAN DEMOGRAPHIC SOCIETY

292

The Fifth Scandinavian Demographic Symposium, 13-16 June 1979 at Hurdalssjøen, Norway. Edited by Helge Brunborg and Knut Sørensen. Scandinavian Population Studies, No. 5. Oslo, 1979. 324 pp.

(Summary of proceedings and texts of papers on the following topics. The decline of mortality ca. 1740-1850; occupational mortality; Other use of population registers; Fertility surveys.)

Selected contents:

LARSEN, Øivind.

Eighteenth century diseases, diagnostic trends and mortality. Pp. 38-54.

In this paper source material on the morbidity and mortality of the Norwegians in the eighteenth century is discussed. 18th century diagnostics are mainly based on symptoms and signs and cannot be directly compared with diagnoses from the later, ethiological period. The medical source material gives no pure medical explanation to the shift in mortality in Norway at the beginning of the nineteenth century. Further information has to be sought in socioeconomic factors important for the spread and outcome of infectious diseases.

SAUGSTAD, Letten F.

Crude death rate and infant mortality 1840-1900 in Norway, Sweden and Denmark and England and Wales with particular attention to the relationship between mortality and population density-urbanisation. Pp. 83-97.

KRISTOFERSEN, Lars B.

Occupational mortality on Norway, 1970-1973. Some sociological remarks on the linkage of the census records 1960 and 1970. Pp 105-119.

NOCAK, Turid; and ØSTBY, Lars.

Some results from the Norwegian fertility survey, 1977. Pp. 211-225.

This paper presents results from the topics pregnancy and birth, fertility intentions, and contraception.

HERNÆS, Erik.

Projections of the Educational Characteristics of the Norwegian Population. Pp. 152-163.

Q. BIBLIOGRAPHIES, DIRECTORIES, AND OTHER INFORMATION SERVICES

- ERIKSEN, John; and HAUKELAND, Jan Vidar. 293
 Norsk familiesosiologi i syttiåra (Norwegian Sociology of the Family in the 1970's). INAS Report 1980:3, Oslo, INAS (Institutt for anvendt sosialvitenskapelig forskning), 1980. 22+X+225 pp.
Part one in the report is a review article in English by Eriksen. It examines briefly family sociology in Norway 1945-1968, and describes main trends in the 1970's. A considerable increase in number of titles as well as subjects covered is noted. The most striking feature is the increased importance of publications directed toward practical or planning purposes, rather than toward the academic world. Also, the family has become more of a helping concept in investigations of other subjects, and not so much a subject for study itself.
Part two is a bibliography by Eriksen and Haukeland, covering the years 1969-79 (introduction and most titles in Norwegian). The 804 entries are arranged both alphabetically by author, and classified according to subject.
- NORDISK MINISTERRÅD 294
 Arbetsmarknadsforskning i Norden (Labour market research in the Nordic countries). In 4 vols. Nordiske Utredninger 1978:20. Stockholm, 1978.
- STATISTISK SENTRALBYRÅ 295
 Fortegnelse over Norges Offisielle Statistikk og andre publikasjoner utgitt av Statistisk Sentralbyrå 1828-1976 (Catalogue of Norwegian Official Statistics and other publications published by the Central Bureau of Statistics 1828-1976). Norges Offisielle Statistikk A 957. Oslo, 1978. 196 pp. ISBN 82-537-0840-3. French translations of titles published before 1950, english translation of titles published after 1950.
- SWEDISH INSTITUTE FOR URBAN HISTORY 296
 International bibliography of urban history: Denmark, Finland, Norway, Sweden. Stockholm, Swedish Institute for Urban Research, University of Stockholm, 1960. 73 pp.

ADDENDUM

PUBLISHED IN 1978

- A1 BERGE, Erling. A.1.2.
Befolkningsutvikling, familie og levekår (Population trends, family and level of living). Syn og segn (Oslo) 84(2): 102-112. 1978
- A2 DAGSVIK, John. G.1.,N.
Analyse av tidsrekke­data for førstegangsgiftermål på grunnlag av en tokjønnsmodell (Time series analysis of first marriages based on a two-sex model). Arbeidsnotater, IO 78/21. Oslo, Statistisk Sentralbyrå, 1978. 11 pp.
- A3 FRIDSTRØM, Lasse. K.3.
Yrkesdeltaking 1977-2000. Revisjon av beregninger utført til Langtidsprogrammet 1978-81 (Labour Force Participation 1977-2000. Revised projections for the National Plan 1978-81). Arbeidsnotater, IO 78/28. Oslo, Statistisk Sentralbyrå, 1978. 57 pp.
- A4 HANSEN, Jens Chr. C.1.,M.3.
Settlement Pattern and Population Distribution in Norway's Regional Policy. Meddelelser, No.46. Bergen, Geografisk Institutt ved Norges Handelshøgskole og Universitetet i Bergen, august 1978. 30 pp.
- A5 MØNNESLAND, Jan. G.1.,E.1.
Utviklingen i giftermål og dødsfall 1911-1976 (The development in marriages and deaths 1911-1976). Statistiske Analyser, No. 35. Oslo, Statistisk Sentralbyrå, 1978. 117 pp.
- A6 RIDENG, Arne. D.3.
Statistisk Sentralbyrås befolkningsprognosemodell: Noen nye erfaringer 1977 og retningslinjer for det videre arbeid (The population projections of the Central Bureau of Statistics of Norway: New experiences 1977 and some guidelines for the future work). Arbeidsnotater, IO 78/10. Oslo, Statistisk Sentralbyrå, 1978. 28 pp.
- A7 STATISTISK SENTRALBYRÅ H.3.
Flyttemotivundersøkelsen 1972 (Survey of Migration Motives 1972). Samfunnsøkonomiske studier, No. 35. Oslo, 1977. 233 pp.
- A8 STORDAHL, Erik; FOSS, Olaf; and HANSEN, Liv. H.3.
Flyttemotivundersøkelsen 1972. Dokumentert variabelkatalog (Survey of Migration Motives 1972. Catalogue of variables with documentations). Arbeidsnotater, IO 78/13. Oslo, Statistisk Sentralbyrå, 1978. 226 pp.
- A9 SØRENSEN, Knut Ø. H.2.
Inn- og utvandring fra Norge 1958-1975 (Immigration to and emigration from Norway 1958-1975). Statistiske Analyser, No. 33. Oslo, Statistisk Sentralbyrå, 1978. 97 pp.
- A10 SØRENSEN, Knut Ø. D.3.
Statistisk Sentralbyrå befolkningsprognosemodell: Teknisk dokumentasjon av framskrivingsmodellen 1977 (The population projection model of the Central Bureau of Statistics of Norway: Technical description of the projection model 1977. Arbeidsnotater, IO 78/26. Oslo, Statistisk Sentralbyrå, 1978. 20 pp.

- A11 BESSESEN, Aage; et.al. H.3.
Bergensflytting 1976-77 (Migration in Bergen 1976-77). Bergen, Bergen kommune og Institutt for sosiologi og statsvitenskapelige fag, Universitetet i Bergen, 1979.
- A12 BORGAN, Jens-Kristian. E.1.
Et opplegg for analyse av kohortdødeligheten i Norge etter 1845 (Design for analysis of cohort mortality in Norway after 1845). Interne notater, No 79/6. Oslo, Statistisk Sentralbyrå, 1979. 17 pp.
- A13 DYRVIK, S.; et.al. Editors. K.I.1., I.1.
Norsk økonomisk historie 1500-1970. Band 1, 1500-1850 (Norwegian Economic history 1500-1970. Vol 1, 1500-1850). Bergen, Universitetsforlaget, 1979.
- A14 ELIASSEN, Jørgen. G.1., I.1.
Gud give dem et mindre sandselig Sindelag. Trekk ved giftermålsinngåelser med særlig vekt på begynnelsen av det seksuelle samlivet for arbeidsfolk i Moss 1776-1814 (May God turn their minds from carnal lust. Aspects of marriage behaviour with particular emphasis on early sexual relationships within the working class in Moss 1776-1814). Hovedfagsoppgave fra Historisk institutt, Universitetet i Oslo, 1979.
- A15 ERIKSTAD, M.J. G.2., I.1.
Husstandsstrukturen i Nord-Norge etter folketellinga i 1801 (The household structure in Northern Norway according to the population census in 1801). Hovedfagsoppgave i historie, Universitetet i Bergen, 1979.
- A16 FRIDSTRØM, Lasse; and SKOGLUND, Tor. K.3.
Perspektivnotat om arbeidsmarkedsforskning i Statistisk Sentralbyrå (Labour market research in the Central Bureau of Statistics. Status and perspectives). Interne notater, No. 79/10. Oslo, Statistisk Sentralbyrå, 1979. 21 pp.
- A17 FØRLANDSÅS, Kjell. H.3.
Tinn kommune i flytteperspektiv. En undersøkelse av utflytternes flyttemønster og vilkår for tilbakeflytting (The municipality of Tinn in a migration perspective. A study of migration patterns for out-migrants and conditions for return migration to the region). Arbeidsnotat, No. 13/79. Bergen, Industriøkonomisk institutt, 1979.
- A18 HANSEN, Jens Chr. M.3.
Industristedene i Norge - status og utvikling siden 1950 (Industrial towns in Norway - status and evolution since 1950). Plan og arbeid (Oslo) 4-5: 173-182. 1979.
- A19 HANSSEN (Holand), Synnøve M. H.3., I.1.
Fra Gudbrandsdal til Salten. Et bidrag til studiet av innenlandske flyttinger på 1800-tallet (From Gudbrandsdal to Salten. A contribution to the study of internal migrations in the 19th century). Hovedfagsoppgave, Historisk Institutt, Universitetet i Oslo, 1979.

- A20 HELGESEN, A.R. Q.
Urban and regional research in Norway 1976-1978. An annotated list. Occasional paper, No. 3/79. Oslo, Norsk institutt for by og regionforskning (NIBR), 1979.
- A21 HELVIG, Magne. C.2.
Nye tendenser i de større norske byers befolkningsutvikling (New tendencies in the population changes of major Norwegian cities). Bedriftsøkonomen, No. 4/79. Oslo, 1979.
- A22 HÆRNES, Erik. L,1.,D.3.
Framskrivning av befolkningens utdanning til år 2000 (Projections of the Educational Characteristics of the Population to the Year 2000). Samfunnsøkonomiske studier, No. 40. Oslo, Statistisk Sentralbyrå, 1979. 112 pp.
- A23 KALDAGER, Alf Terje. M.3.
Fabrikken i grenda. En studie av industridominerte kretser med spredt bosetting og deres bedrifter (The factory and the neighbourhood. A study of sparsely populated enumeration districts dominated by manufacturing industry and their enterprises). Arbeidsrapport, No. 13. Geografiske studier av utkantstrøk i Norge. Bergen, Geografisk institutt, NHH og universitetet i Bergen, 1979.
- A24 KRISTOFERSEN, Lars. E.6.
Yrke og dødelighet. Tilleggsberegninger til tidligere analyse (Occupational mortality. Additional estimates to an earlier analysis). Rapporter, No. 79/19. Oslo, Statistisk Sentralbyrå, 1979. 172 pp.
- A25 MYKLEBOST, Hallstein. C.2.
Norges tettsteder. Folketall og næringsstruktur (Densely settled districts of Norway. Population and industrial structure). AD novas. Norwegian geographical Studies, No. 15. Oslo-Bergen-Tromsø, Universitetsforlaget, 1979.
- A26 MYKLEBOST, Hallstein. B.1.
Bosettingsutviklingen i Norge 1960-1970 (Population and settlement change in Norway 1960-1970). Artikler, No. 115. Oslo, Statistisk Sentralbyrå, 1979. 95 pp.
- A27 NEDREBØ, Y. H.3.,I.1.
Fra Jølster til Bergen. (Om flyttinger på Vestlandet ca. 1650-1850) (From Jølster to Bergen. (On migration in Western Norway ca. 1650-1850)). Hovedfagsoppgave i historie, Universitetet i Bergen, 1979.
- A28 RANDSBORG, Hege Brit. B.1.,I.1.
Befolkningsutviklingen i Bø i Telemark 1727-1815 (Population changes in Bø in Telemark 1727-1815). Hovedoppgave fra Historisk Institutt, Universitetet i Oslo, 1979.
- A29 SØRENSEN, Knut. E.6.,D.3.
Regional dødelighet. Oversikt og opplegg til behandling i befolkningsframskrivningen (Regional Mortality. Review and treatment in the Population Projection Model). Rapporter, No. 79/22. Oslo, Statistisk Sentralbyrå, 1979. 41 pp.

- A30 THOMASSEN, E. K.3.,I.1.
Kvinneres tilknytning til arbeidslivet i første del av 1800-tallet (Women's relationship to the labour market in the first part of the 19th century). Hovedfagsoppgave i historie, Universitetet i Bergen, 1979.
- A31 VATNE, Eirik. K.3.
Befolkningsstruktur og sysselsetting i fortid og framtid (Population structure and employment in the past and in the future). Plan og arbeid (Oslo). 4-5: 194-200. 1979.
- A32 ØYGARDEN, S.G. B.1.,I.1.
Avaldsnes 1758-1801. (Demografisk undersøkelse av et vest-norsk prestegjeld) (Avaldsnes 1758-1801. (A demographic study of a West-Norwegian parish)). Hovedfagsoppgave i historie, Universitetet i Bergen, 1979.
- A33 AARAAS, Olav. I.2.
Demografiske kriser i Norge: Hunger eller sykdom (Demographic crises in Norway: Hunger or disease)? Sosialmedisinsk tidskrift (Stockholm) 56(9): 457-462. 1979.

PUBLISHED IN 1980

- A34 ASPLAN. D.3.
Befolkningsprognoser - kommentarer til et eksempel (Population projections- comments to an example). Temaserie, No. 1. Oslo, 1980
- A35 BJERKEDAL, Tor. F.3.
Yrke og fødsel. En undersøkelse over betydningen av kvinners yrkesaktivitet for opptreden av fosterskader (Economic activity and births. A study of the significance of female labour force participation for the occurrence of congenital anomalies). Rapporter, No.80/9. Oslo, Statistisk Sentralbyrå, 1980. 93 pp.
- A36 BJØRU, Kirsten. G.1.,K.3.
Kvinneres giftealder og senere yrkesaktivitet (Women's age at marriage and subsequent labour force participation). Notat, No. 1. Oslo, Institutt for anvendt sosialvitenskapelig forskning (INAS), 1980
- A37 BJØRU, Kirsten; and SKREDE, Kari. G.1.,K.3.
A Decade in transition - Changes in the Labour Force Participation and Family Adjustment of Norwegian Women in the Seventies. Notat, No. 2. Oslo, Institutt for anvendt sosialvitenskapelig forskning (INAS), 1980.
- A38 BLIX, Ellen; and GLATTRE, Eystein. E.7.
En vurdering av dødsårsaksstatistikken. Feil på dødsmeldingene (Evaluation of the statistics on causes of death. Errors in death certificates). Rapporter, No. 80/13. Oslo, Statistisk Sentralbyrå, 1980. 73 pp.

- A39 BRUN, Stein Erland; and SØRENSEN, Knut Ø. C.1.,D.3.,N
Økonomisk-demografisk modellsystem for regional befolkningsfor-
deling. Årsrapport for 1979 (Economic-demographic Model of
Regional Population redistribution. Report 1979). Interne
notater, No. 80/4. Oslo, Statistisk Sentralbyrå, 1980. 26 pp.
- A40 BRUN, Stein Erland; and SØRENSEN, Knut Ø. C.1.,D.3.,N
Økonomisk-demografisk modellsystem for regional befolkningsfor-
deling. Årsrapport for 1980 (Economic-demographic Model of
Regional Population redistribution. Report 1980). Interne
notater, No. 80/37. Oslo, Statistisk Sentralbyrå, 1980. 30 pp.
- A41 BYSVEEN, Tor; FOSS, Olaf; and KNUTSEN, Sigmund. H.3.
Flyttekjeder i Oslo-området (Migration chains in the Oslo region).
Rapport, No. 5. Oslo, Norsk institutt for by- og regionsforsk-
ning (NIBR), 1981.
- A42 DAGSVIK, John. K.3.,N.
A dynamic model for qualitative choice behaviour. Implications
for the analysis of labour force participation when the total
supply of labour is latent. Rapport, No. 80/11. Oslo,
Statistisk Sentralbyrå, 1980. 25 pp.
- A43 ENGELSTAD, F. K.3.
Utsatte grupper i arbeidsmarkedet (Risk groups in the labour
market. A draft survey and discussion of policy instruments).
Utkast til kartlegging og drøfting av virkemidler. Rapport A,
No. 4/80. Oslo, Institutt for samfunnsforskning, 1980.
- A44 FOSS, Olaf. H.3.,K.3.
Kvinner, sysselsetting, flyttebevegelser (Women, employment and
migration). I Kvinnepolitisk planforum (1980): Rapport fra seminar om
"Kvinner og regional planbygging". Rapport, No. 1: 6-19. Oslo,
Norsk institutt for by- og regionforskning (NIBR), 1981.
- A45 FRIDSTRØM, Lasse. N.
Lineære og log-lineære modeller for kvalitative avhengige variable
(Linear and log-linear qualitative response models). Rapporter,
No. 80/26. Oslo, Statistisk Sentralbyrå, 1980. 122 pp.
- A46 FRIDSTRØM, Lasse. A.1.2.
Hvor mange blir vi (How many people)? Bergen Banks Kvartals-
skrift, No. 1: 13-27. Oslo, 1980.
- A47 FURE, Eli. F.1.,I.1.
Den ekteskapelige fruktbarhet i Kolbu, ca. 1870-1910. En studie
av fruktbarhetsfallets innledningsfase (Marital fertility in
Kolbu around 1870-1910. An analysis of the initial phase of the fer-
tility decline). Hovedoppgave i historie, Universitetet i Oslo,
våren 1980. Stensil.
- A48 HALVORSEN, Bjørg. F.1.
Fruktbarheten i og utenfor ekteskap i Norge 1946-1975 (Marital
and nonmarital fertility in Norway 1946-1975).
Artikler, No. 120. Oslo, Statistisk Sentralbyrå, 1980. 97 pp.

- A49 HALVORSEN, K. Editor. K.3.
Arbeid og sysselsetting foran 80-åra. Bidrag til en arbeidslivs-
sosiologi (Labour and employment in the eighties. Contributions
to a work life sociology). Oslo, 1980.
- A50 HANSEN, Jens Chr. M.3.
Industristedenes plass i Norges bosetningsmønster (The role of
the industrialized regions in Norwegian settlement patterns).
Ad Novas. Norwegian Geographical Studies, No. 17. Oslo-
Bergen-Tromsø, Universitetsforlaget, 1980.
- A51 HANSEN, Jens Chr. M.3.
Distriktspolitikk også for byane (Regional policy even for the
cities)? Syn og Segn (Oslo) 86(5): 271-284. 1980.
- A52 HAUKLI, Odd. L.3.
Geografisk variasjon i helsetilstanden i Norge (Regional differ-
ences in health conditions in Norway). Hovedfagsoppgave i geo-
grafi, Geografisk institutt, Universitetet i Trondheim, 1980.
- A53 HELDAL, Johan. O.3.
Prøveundersøkelse i Folke- og boligtellingsen 1980. Rapport fra
kvalitetskontrollundersøkelsen (A pilot survey for the Popu-
lation and Housing Census 1980. Report from the quality control
study). Interne notater, No. 80/3. Oslo, Statistisk
Sentralbyrå, 1980. 40 pp.
- A54 HELVIG, Magne. C.1.
New trends in the development of population and settlement
pattern - the case of East Norway. Paper presented to the Inter-
national Geographical Congress' section on urban geography.
Tokyo, Japan, September 1980.
- A55 HERNÆS, Erik. L.1.,N.
Innføring av aldersspesifikasjon i utdanningsmodellen: inn-
ledende analyse av hvordan et utdanningsvalg avhenger av alder
og tidligere utdanning (Introducing age into the projection
model for educational characteristics: Introductory analysis of
how choice of education depends on age and previous educational
attainment). Rapporter, No. 79/25. Oslo, Statistisk Sentralbyrå,
1979. 37 pp.
- A56 HERSTAD, John. I.1.
Folketilvekst, åkerbruk og kornimport i Norge tidlig på 1800-
tallet (Population, agricultural production and grain import in
the early 19th century Norway). Historisk Tidsskrift (Oslo)
59(4): 355-388. 1980.
- A57 IVERSEN, Gunvor. K.3.
Kvinner arbeid ute og hjemme. Rapport fra prøveundersøkelsen
(Women's work outside and within the household. Report from the
pilot survey). Interne notater, No. 80/33. Oslo, Statistisk
Sentralbyrå, 1980. 66 pp.

- A58 KALDAGER, Alf Terje. C.1.
En statistisk analyse av bosettingstettheten i norske kommuner 1974 (A statistical analysis of population density in Norwegian municipalities 1974). Meddelelser No. 58. Bergen, fra Geografisk Institutt ved Norges Handelshøyskole og Universitetet i Bergen, 1980.
- A59 KALDAGER, Alf Terje. K.3.,H.3.
Faktorer som påvirker den geografiske mobilitet i arbeidsmarkedet i Norge (Influences on the geographical mobility in the Norwegian labour market). Meddelelser, No. 59. Bergen, Geografisk Institutt ved Norges Handelshøyskole og Universitetet i Bergen, 1980.
- A60 KREFTREGISTERET. L.3.
Krefthyppighet i Norge. Regionale variasjoner 1966-1975 (The frequency of cancer in Norway. Regional variations 1966-75). Oslo, 1980.
- A61 LANGHOLM, S.; and SEJERSTED, F. Editors. H.1.,I.1.
Vandringer. Festskrift til Ingrid Semmingsen på 70-årsdagen 29.mars 1980 (Migrations. Publication in honor of Ingrid Semmingsen on her 70th anniversary 29 March 1980). Oslo, 1980.
- A62 MIRANDA, A. G.1.
Nuptiality in Bangladesh. Publikasjoner, No. 95. Bergen, Development Research and Action Programme (DERAP), Chr. Michelsens institutt, 1980.
- A63 MOEN, Bjørn; REISZ, Bjørn Andresen; and STRAND Arvid. H.3.
Flyttemønster i Osloregionen. Omfang og konsekvenser av flytting til, fra og innen Osloregionen i 1970-åra (Migration patterns in the Oslo region. Extent and consequences of migration out of, into and within Oslo region in the seventies). Rapport, No. 47. Oslo, Norsk institutt for by- og regionforskning (NIBR), 1979.
- A64 MØNNESLAND, Jan. G.1.
Bestandsuavhengige giftermålsrater (Marriage rates adjusted for composition of unmarried population. Rapporter, No. 80/24. Oslo, Statistisk Sentralbyrå, 1980. 50 pp.
- A65 NOACK, Turid; and ØSTBY, Lars. F.1.,O.4.
Erfaringer fra opplegget og gjennomføringen av Fruktbarhetsundersøkelsen 1977 (Experiences from the preparation and implementation of the Norwegian Fertility Survey 1977). Interne notater, No. 80/1. Oslo, Statistisk Sentralbyrå, 1980. 190 pp.
- A66 NORDBØ, Bente. B.1.,I.1.
Befolkningsutviklingen i Nesodden prestegjeld 1710-1875 (Population trends in the Nesodden parish 1710-1875). Hovedoppgave i historie, Universitetet i Oslo, våren 1980. Stensil.
- A67 RINGEN, Anders. Editor. H.2.
Migration to and within the Nordic countries. Report from Nordic conference on labour migration research, 5. Oslo, 1979. Oslo, Nordisk ministerråd og Institutt for anvendt sosialvitenskapelig forskning, 1980.

- A68 SOGNER, Sølvi. H.3.,I.1.
Børselkvinne på flyttefot og barnefedre på flukt. En studie i flytting i forbindelse med uekte fødsel i Vår Frelses menighet i Christiania 1731-1800. Trykt i Vandringer. Festskrift til Ingrid Semmingsen på 70-årsdagen 29. mars 1980 (Expecting women on the move and alleged fathers on the run. An analysis of migration related to extramarital births in Vår Frelses parish, Christiania: 1731-1800. In: Langholm and Sejersted (ed) Migrations. Publication in honor of Ingrid Semmingsen on her 70th anniversary 29 March 1980). Redaksjon: Sivert Langholm, Francis Sejersted. Oslo, 1980.
- A69 STATISTISK SENTRALBYRÅ I.1.
Norges første folketelling 1769 (The first population census in Norway 1769). Norges offisielle statistikk, NOS B 106. Oslo, 1980. 368 pp.
- A70 STORDAHL, Erik; and SØRENSEN, Knut Ø. H.3.
Oppfølging av Flyttemotivundersøkelsen 1972. Foreløpig dokumentasjon (Following up the Survey of Migration Motives 1972. Preliminary Documentation). Interne notater, No. 80/10. Oslo, Statistisk Sentralbyrå, 1980. 16 pp.
- A71 SØRENSEN, Annemette. K.3.
Gifte kvinners tilknytning til arbeidsmarkedet. Konsekvenser av yrkeserfaring over livsløpet (Married women's relationship to the labourmarket. Consequences of labour market experience over the life cycle). Notat, No. 4. Oslo, Institutt for anvendt sosialvitenskapelig forskning (INAS), 1980.
- A72 SØRENSEN, Knut Ø. H.3.,N.
Glatting av flytterater i Statistisk Sentralbyrås befolkningsframskrivninger (Graduation of Migration Rates in population projections of the Central Bureau of Statistics). Rapporter, No. 80/32. Oslo, Statistisk Sentralbyrå, 1980. 27 pp.
- A73 SØRENSEN, Knut Ø. D.3.
Tilgangen på arbeidskraft i fylkene fram mot år 2000. Et forsøk på framskriving (Supply of Labour towards the year 2000. A Projection Experiment). Interne notater, No. 80/40. Oslo, Statistisk Sentralbyrå, 1980. 44 pp.
- A74 VISLIE, Jan. F.1.
Kan beslutningen om å få barn belyses ved hjelp av økonomisk teori (Can decisions about having children be analysed by the methods of economic theory)? Tidsskrift for samfunnsforskning (Oslo), 20: 435-446. 1979.
- A75 ØSTBY, Lars. F.4.1.
Prevensjonsbruken i Norge. Kursreferat fra "Kurs i prevensjon for primærlegen" (Contraception in Norway. Lectures given in "Seminar for medical practitioners"). Oslo, KabiVitrum, 1980.

PUBLISHED IN 1981

- A76 ALSTAD, Johan A. H.3.
Oppfølging av Flyttemotivundersøkelsen 1972 - en studie av tilbakeflytting (Following up the Survey of Migration Motives 1972. A study in return migration). Magistergradshandling i geografi, Geografisk Institutt, Universitetet i Oslo, 1981.
- A77 BRUN, Stein Erland. K.3.
Tilgangen på arbeidskraft i fylkene for årene 1971-1979 (Supply of Labour in the Norwegian Counties for the years 1971-1979). Rapporter, No. 80/10. Oslo, Statistisk Sentralbyrå, 1981. 72 pp.
- A78 BRUNBORG, Helge. A.1.2.
Befolkningssituasjonen i de industrialiserte land (The Population Situation in the Developed Countries). Forum for utviklingsstudier (Oslo). No. 6-8: 43-52. 1980.
- A79 BRUNBORG, Helge; MØNNESLAND, Jan; and SELMER, Randi. G.1.,D.3.
Framskrivning av folkemengden etter ekteskapeleg status 1979-2025 (Projection of the Population by Marital Status 1979-2025). Rapporter No. 81/12. Oslo, Statistisk Sentralbyrå, 1981. 75 pp.
- A80 BRUNSTAD, R; COLBJØRNSSEN, T; and RØDSETH, T. Editors. K.3.
Sysselsettingen i søkelyset (Focus on employment). Oslo-Bergen-Tromsø, Universitetsforlaget, 1981.
- A81 BUFLOD, Halvdan. Q.
Oversikt over regional forskning i Norge. Pågående og planlagte prosjekter i siste halvår 1981 (Overview of regional research in Norway. Ongoing and planned projects in the last six months of 1981). Rapport, No. 5. Oslo, Norsk Institutt for by- og regionsforskning (NIBR), 1981.
- A82 DUPÂQUIER, J.; HÉLIN, E.; LASLETT, P.; LIVI-BACCI, M.; and SOGNER, S. Editors. I.1.,G.1.
Marriage and Remarriage in Populations of the Past. Academic Press, 1981. (Konferanserapport, Kristiansand, 1979).
- A83 ELIASSEN, Jørgen; and SOGNER, Sølvi. Editors. F.6.,I.1.
Bot eller bryllup. Ugifte mødre og gravide bruder i det gamle samfunnet (Penalty or wedding. Unmarried mothers and pregnant brides in the former society). Oslo-Bergen-Tromsø, Universitetsforlaget, 1981.
- A84 ENGAAS, Bjørn R. F.1.
Hvor mange barn skal vi ha? En oversikt over faktorer som påvirker fruktbarhetsforholdene (How many children are we going to have? Overview of factors affecting the fertility patterns). Rapport, No. 283, Oslo, Gruppe for ressursstudier, 1980.
- A85 ENGELSEN, Rolf. D.3.
Statistisk Sentralbyrås befolkningsprognosemodell: En sammenligning av resultatene etter ulike alternativ ved framskrivningen 1979-2000 (The population Projections of the Central Bureau of Statistics of Norway: A comparison of the Results of Different Alternatives in the Projection 1979-2000). Interne notater, No. 81/23. Oslo, Statistisk Sentralbyrå, 1981. 19 pp.

- A86 FRIDSTRØM, Lasse. D.3.
Framskrivning av arbeidsstyrken 1979-2000 (Labour Force Projections 1979-2000). Samfunnsøkonomiske studier, No. 48. Oslo, Statistisk Sentralbyrå, 1981. 109 pp.
- A87 HANSEN, Jens Chr. M.3.
Industristedenes plass i bosettingsmønsteret. I: Regionale og internasjonale utviklingsproblemer (The role of industrial towns in the settlement pattern. In: Regional and international problems of development). Norsk Samfunnsgeografisk Forening, Skrifter, No. 8. Oslo, 1981.
- A88 HANSEN, Jens Chr. M.3.
Settlement pattern and population distribution as fundamental issues in Norway's regional policy. I: Webb J.W., Naukkarinen, A. og Kosinski, L.: Policies of population redistribution. Oulu, IGU Commission on Population Geography, 1981.
- A89 HERNÆS, Erik. D.3.,L.1.
Utdanningsmodell med alder. Foreløpig utgave (Educational Projection Model with Age Specification. Preliminary Version). Interne notater, No. 81/29. Oslo, Statistisk Sentralbyrå, 1981. 32 pp.
- A90 HJORT, Peter F.; and WAALER, Hans Th. J.2.
Høyere levealder hos norske adventister 1960-1977: Et budskap om livsstil og helse (Extended life expectancy of Norwegian adventists 1960-1977: A message about lifestyle and health)? Tidsskrift for den norske Legeforening (Oslo), 101(11): 623-627. 1981.
- A91 JENSEN, An-Magritt. F.5.
Jobb, barn og likestilling. Om kvinners tilpasning til arbeid og familie (Work, Children and Equality. On the Adaptation of Women to Work and Family). Artikler, No. 129. Oslo, Statistisk Sentralbyrå, 1981. 24 pp.
- A92 JENSEN, An-Magritt. F.5.
Barnetall og yrkesaktivitet (Number of Children and Female Employment). Artikler, No. 132. Oslo, Statistisk Sentralbyrå, 1981. 52 pp.
- A93 JENSEN, An-Magritt. K.3.
Middelaldrende kvinner, yrkesaktivitet og omsorgsarbeid (Middle-aged Women, Employment and Periods of Childcare). Arbeidsnotat, No. 2, pp. 111-122. Oslo, NAVFs Sekretariat for kvinneforskning, 1981.
- A94 KRISTIANSEN, Jan Erik. F.4.5.
Abort og sosial bakgrunn. Sammenhengen som forsvant (Abortion and social background. The relationship that disappeared)? Tidsskrift for samfunnsforskning (Oslo) 22(5): 383-405. 1981.
- A95 KRISTIANSEN, Jan Erik. G.1.
Hva er egentlig skilsmissehyppigheten? - En analyse og sammenlikning av ulike typer data og beregningsmetoder (What actually is the divorce rate? An analysis and comparison of different data sets and different estimation methods). Notat, Universitetet i Oslo, 1981. En kortere versjon finnes i Fokus på Familien, No. 2, 1982.

- A96 KVÅLE, Ingrid. F.4.1.,I.1.
 Alt hva mødrene har kjempet.... Barnebegrensning i et lokalsamfunn 1910-1940, - utbredelse, metoder og motiv (All the struggles of the mothers.... Family planning in a local society 1910-1940, prevalence, methods and motives). Hovedoppgave for Historisk institutt, Universitetet i Oslo, 1981.
- A97 LIAN, Jon Inge. D.2.,D.3.
 Trends in Demographic Structure in Norway 1960-2000. Artikler, No. 130. Oslo, Statistisk Sentralbyrå, 1981. 56 pp.
- A98 MOEN, Bjørg. F.1.
 Fruktbarhetsutvikling og fruktbarhetsteorier. Norge i et internasjonalt perspektiv (Trends and Theories in Fertility. Norway in an International Context). Samfunnsøkonomiske studier, No. 47. Oslo, Statistisk Sentralbyrå, 1981. 120 pp.
- A99 MYKLEBOST, Hallstein. E.6.
 Regional variations of mortality in Norway. Fennia (Helsinki) 1981: 153-163.
- A100 NOACK, Turid; and ØSTBY, Lars. F.1.,G.1.
 Fruktbarhet blant norske kvinner. Resultater fra Fruktbarhetsundersøkelsen 1977 (Fertility among Norwegian Women. Results from the Fertility Survey 1977). Samfunnsøkonomiske studier, No. 49. Oslo, Statistisk Sentralbyrå, 1981. 349 pp.
- A101 RANDSBORG, Hege Brit; and SOGNER, Sølvi B. F.1.I.1.
 Fruktbarhetsfallet i Norge omkring 1900 (The fertility decline in Norway around 1900). Samtiden (Oslo) No. 6: 21-26. 1980.
- A102 RAMSØY, Natalie Rogoff. N.
 Den Norske folketellingsbanken - forskningspotensial belyst med eksempler (The Norwegian census data-bank. A research potential illustrated by examples). Tidsskrift for samfunnsforskning (Oslo) 22(4): 287-308. 1981.
- A103 SOGNER, Sølvi. F.4.4.
 Om barnebegrensning i Norge ved slutten av 1800-tallet. Melding av Ida Blom: Barnebegrensning - synd eller sunn fornuft (On family planning in Norway at the end of the 19th century. A review of Ida Blom: Family planning - sin or common sence. Family planning in Norway from the end of the 19th century. Heimen (Oslo) 18 (1): 577-585. 1981
- A104 STATISTISK SENTRALBYRÅ F.1.
 Fruktbarhetsundersøkelsen 1977 (Fertility Survey 1977). Norges Offisielle Statistikk, NOS B 197. Oslo, 1981. 225 pp.
- A105 SØRENSEN, Annemette. K.3.
 An analysis of Women's Movements in and out of the Labor Force. Arbeidsrapport No. 81:4. Oslo, Institutt for anvendt sosialvitenskapelig forskning, 1981.
- A106 SØRENSEN, Knut Ø. C.1.,D.3.,N.
 Økonomisk-demografisk modellsystem for regional befolkningsfordeling. Årsrapport for 1981 (An Economic-demographic Model of Regional Population Redistribution. Report 1981). Interne notater, No. 82/2. Oslo, Statistisk Sentralbyrå, 1982. 9 pp.

- A107 ØSTBY, Lars. F.1.
Norwegian Fertility Survey, 1977: A Summary of Findings. World Fertility Survey, Summary of Findings, No. 29. Voorburg, 1981. Also published as Artikler, No. 134 Oslo, Statistisk Sentralbyrå, 1981. 22 pp.
- PUBLISHED IN 1982
- A108 BJØRU, K.; and SKREDE, K. G.2.,F.1.
Familiemønster i forandring. Trekk ved giftermåls-, samlivs-, skilsmisse- og fruktbarhetsutviklingen i 1970-åra (Changing family structure. Aspects of marriage, cohabitation, divorce and fertility tendencies in the seventies). Rapport, No. 82:1. Oslo, Institutt for anvendt sosialvitenskapelig forskning. (INAS), 1982.
- A109 BORGAN, Ø.; LIESTØL, K.; and EBBESEN, P. E.1.,N.
Efficiencies of observational plans for an illness-death model. Statistical research report, No. 3. Oslo, Institutt for matematiske fag, Universitetet i Oslo, 1982.
- A110 BRUN, Stein Erland. H.3.,K.3.
Nettoflytting og arbeidsmarked i fylkene. En foreløpig analyse av sammenhenger (Net Migration and the Labour Market of the Norwegian Counties. A Preliminary Analysis of Interdependencies). Rapporter, No. 82/6. Oslo-Kongsvinger, Statistisk Sentralbyrå, 1982. 68 pp.
- A111 BRUNBORG, Helge; and MØNNESLAND Jan. P.
Internasjonal befolkningskonferanse (International Population Conference). Sosialøkonomen (Oslo) 36(3): 4-7. 1982.
- A112 BRUNBORG, Helge; and VISLIE, Jon. F.1.
Økonomiske modeller og fruktbarhet. Kommentar til Jan Erik Kristiansen: Homo economicus og fertilitet. En steril modell. En drøfting av økonomiske fruktbarhetsteorier (Economic models and fertility. Comments to Jan Erik Kristiansen: Homo economicus and fertility. A sterile model. A discussion of economic fertility theories). Sosialøkonomen (Oslo) 36(9): 12-17. 1982.
- A113 BYSVEEN, T.; KNUTSEN, S; and NILSEN, E. H.3.
Flyttere til Sandefjord. Flyttemotiver - bolig - arbeid (Migrants to Sandefjord. Migration motives, housing-work). Rapport, No. 11. Oslo, Norsk institutt for by- og regionforskning (NIBR), 1982.
- A114 BYSVEEN, T.; and KNUTSEN, S. H.3.
Flyttekjeder i Trondheim. Boligbyggingens ringvirkninger i boligmarkedet (Migration chains in Trondheim. The spread of effects of House-construction on the housing market). Rapport, No. 5. Oslo, Norsk institutt for by- og regionforskning, 1982.
- A115 ENGELSEN, Rolf. E.6.,I.1.
Sosiale skilnader i mortalitet på landsbygda i Norge i åra 1802 og 1803. Nytt lys på mortalitetsnedgangen (Social differences in mortality in the rural districts in Norway in 1802 and 1803. New light on the mortality decrease)? Hovedoppgave i historie, Universitetet i Bergen, 1982. Stensil.

- A116 ENGAAS, Bjørn R. L.3.
 Perspektiver på den framtidige ressursbruken i kreftomsorgen
 (Perspectives on future use of resources in the care for cancer
 patients). Rapport, No. 392. Oslo, Gruppen for ressursstudier,
 1981.
- A117 FAALAND, Just. (Editor). K.1.1.
 Population growth and world economic development - a fifty year
 perspective. 2. draft. Nobel symposium, 53. Arbeidsnotater, No.
 A 240 Rev. Bergen, Development Research and Action Programme
 (DERAP), Chr. Michelsens institutt, 1981.
- A118 GJØNNES, Siri. F.1., I.1.
 Fruktbarhetsfallet i Elverum. En studie av den ekteskapelige
 fertilitet i perioden 1875 til 1930 (The decrease in fertility in
 Elverum. A study of marital fertility for the period 1875-1930).
 Hovedoppgave i historie, Universitetet i Oslo, 1982. Stensil.
- A119 HAGA, D.; and AARSTAD, S. C.1.
 Befolknings- og sysselsettingsutviklinga i Finnmark 1970-1980
 (Trends in population and employment in Finnmark 1970-1980).
 Notat, No. 114. Norsk institutt for by- og regionforskning (NIBR),
 1982.
- A120 HAARSTAD, Kjell. H.3.
 Samiske vandringer i Sør-Norge (Lappish migrations in Southern
 Norway). Trondheim, Tapir, 1981.
- A121 HAAVET, Elisabeth. F.6., I.1.
 Avvik eller uhell? Ugifte foreldre omkring 1800 - en sosial
 analyse (Deviance or accident? Unmarried parents around 1800 -
 a social analysis). Hovedoppgave i historie, Universitetet i
 Bergen, 1982. Stensil.
- A122 KRISTIANSEN, Jan Erik. A.3.
 Demografi. En utfordring til sosiologien (Demography. A
 challenge to sociology)? Sosiologi i dag (Oslo) 12(4): 3-13. 1982.
- A123 KRISTIANSEN, Jan Erik. F.1.
 Homo Economicus og fertilitet: En steril modell. En drøfting av
 økonomiske fertilitetsteorier (Homo Economicus and fertility. A
 sterile model. A discussion of economic theories of fertility).
 Sosialøkonomen (Oslo) 36(7): 15-22. 1982.
- A124 KRISTOFERSEN, Lars. E.6.
 Yrke og dødelighet. Dokumentasjonsnotat I. Om koblingen av
 dødematerialet 1970-1973 med folketellingene 1960 og 1970. (Occu-
 pation and mortality Documentation report I. On the matching of
 mortality data 1970-1973 with the population censuses 1960 and 1970).
 Interne notater, No. 82/13. Oslo, Statistisk Sentralbyrå, 1982. 18 pp.
- A125 LINTOFT, Kari. I.1.
 Befolkningsutviklingen i Vang ca. 1665-1769 (Population trends in
 Vang about 1665-1769). Hovedoppgave i historie, Universitetet i
 Oslo, 1982. Stensil.

- A126 MOEN, Bjørg; and SEVALDSON, Per. F.1.,G.1.
Fødselstallene i Norge 1950-1975. Endringsfaktorer (Births in Norway 1950-1975. Components of Change). Artikler, No. 135. Oslo-Kongsvinger, Statistisk Sentralbyrå, 1982. 81 pp.
- A127 MOEN, Bjørg. F.1.,G.1.
Hvorfor blir det født stadig færre barn? Om faktorene bak endringene i fødselstallet (Why fewer babies? The Demographic Component of Fertility Change). Sosiologi i dag (Oslo) 12(4): 25-40. 1982.
- A128 MYKLEBUST, Geir. C.1.
Turnaround-trenden og yrkesbefolkningens regionale omfordeling i Norge etter 1960 (The turnaround-trend and the regional redistribution of the working population in Norway after 1960). Ny kulturgeografisk serie, No. 6. Oslo, Geografisk institutt, Universitetet i Oslo, 1982.
- A129 MØNNESLAND, Jan; BRUNBORG, Helge; and SELMER, Randi. G.1.
Inngåelse og oppløsning av ekteskap etter alder og varighet (Formation and Dissolution of Marriage by Age and Duration). Rapporter, No. 82/2. Oslo-Kongsvinger, Statistisk Sentralbyrå, 1982. 77 pp.
- A130 NOACK, T.; and ØSTBY, L. F.1.,L.3.
Færre barn - en utfordring for helsesektoren (Fewer children - a challenge to the health sector)? Tidsskrift for Samfunnsforskning no.1-2 1985, Spesialnr. eds. Dag Gjestland og Per Måseide. Oslo, 1985.
- A131 NÆSS, Hans Eyvind. G.1.,I.1.
Intet got og roligt ecteskab at forvente. Vår første skilsmisselov, ekteskapsordinansen av 1582 og dens praktiske følger (No good and quiet marriage to be expected. Our first law on divorce, the ordinance on marriage of 1582 and its consequences). Historisk tidsskrift (Oslo) 61(1): 52-61, 1982.
- A132 PEDERSEN, Johnny. F.1.
Fruktbarhetsundersøkelsen 1977. Kodebok med fordelinger (The fertility survey 1977. A codebook with straight runs). Rapporter, No. 54. Bergen, Norsk samfunnsvitenskapelig datatjeneste (NSD), 1982.
- A133 RIDENG, Arne. B.2.,D.3.
Befolkningsutviklingen i Norge fram til år 2025 (Changes of Population in Norway to 2025). Artikler, No. 138. Oslo-Kongsvinger, Statistisk Sentralbyrå, 1982. 83 pp.
- A134 SELSTAD, Tore. B.2.
Befolkningsutviklingen i Oppland 1960-2000 (The population trends in Oppland 1960-2000). Informasjonsserien, No. 33. Lillehammer, Oppland Distriktshøgskole, 1982.
- A135 SEVALDSON, Per. D.2.,D.3.
Bølger i befolkningstallene (Waves in population figures). Sosiologi i dag (Oslo) 12(4): 15-24. 1982.

- A136 SJØHOLT, Peter. D.3.
Befolknings- og sysselsettingsprognoser på kommunenivå. Problemer i konstruksjon og bruk (Population and employment projections at the municipality level. Problems in construction and application). Meddelelser, No. 68. Bergen, Norges handelshøyskole og Universitetet i Bergen, Geografisk institutt, 1982.
- A137 SOSIALDEPARTEMENTET F.4.5.,M.2.
Erfaringer med lov om svangerskapsavbrudd og svangerskapsforebyggende tiltak (Experiences with the law on abortion and contraceptive measures). Stortingsmelding, No. 17. (1982-83). Oslo, 1982.
- A138 STATISTISK SENTRALBYRÅ. C.1.,S.
Folketallet i kommunene 1951-1980. I Østlandet, II Sørlandet og Vestlandet, III Trøndelag og Nord-Norge (Population in municipalities 1951-1980. I Østlandet, II Sørlandet and Vestlandet, III Trøndelag and Nord-Norge). Norges offisielle statistikk, NOS B286, NOS B287, NOS B288. Oslo-Kongsvinger, 1982. I: 206 pp, II: 240 pp, III: 213 pp.
- A139 STATISTISK SENTRALBYRÅ C.1.,D.3.,S.
Framskrivning av folkemengden 1982-2025. Regionale tall (Population projections 1982-2025. Regional figures). Norges offisielle statistikk, NOS B317. Oslo-Kongsvinger, 1982. 198 pp.
- A140 STORDAHL, Erik; SEVALDSON, Per; and ØSTBY Lars. H.3.
Prioritert program for videre flytteforskning i Statistisk Sentralbyrå (Program (with priorities) for further migration research in the Central Bureau of Statistics of Norway). Interne notater, No.82/30. Oslo, Statistisk Sentralbyrå, 1982. 8 pp.
- A141 TRØNNES, Dag Helge. D.3.
Statistisk Sentralbyrås befolkningsprognosemodell: Regionale forskjeller i dødelighet (The population Projection Model of the Central Bureau of Statistics of Norway: Regional Mortality Differentials). Interne notater, No. 82/11. Oslo, Statistisk Sentralbyrå, 1982. 27 pp.
- A142 WALLØE, Lars. D.1.,I.1.
Pest og folketall 1350-1750 (Pest and population size 1370-1750) Historisk Tidsskrift (Oslo) 61(1): 1-45. 1982.
- A143 ØSTBY, Lars. F.4.1.,
F.4.5., G.1.
Hva er skjedd med samliv, prevensjon og abort siden 1950 (What have happend in fields of cohabitation, contraception and abortion since 1950)? Sosiologi i dag (Oslo) 12(4):41-58. 1982.
- A144 AAMODT, Per O. L.1.
Utdanning og sosial bakgrunn (Education and social background). Samfunnsøkonomiske studier, No. 51. Oslo-Kongsvinger, Statistisk Sentralbyrå, 1982. 210 pp.

PUBLISHED IN 1983

- A145 BRUNBORG, Helge. F.1.,F.5.
An Economic Model of Fertility, Sex and Contraception. Ph.D.
dissertation, University of Michigan, Ann Arbor, 1983.
- A146 DYRVIK, Ståle. I.1.
Historisk demografi. Ei innføring i metodane (Historical demo-
graphy. A methodological introduction). Oslo-Bergen-Tromsø,
Universitetsforlaget, 1983.
- A147 ENGELSEN, Rolf. E.6.I.1.
Mortalitetsdebatten og sosiale skilnader i mortalitet (The morta-
lity debate and social difference in mortality). Historisk
tidsskrift (Oslo) 62(2): 161-202. 1983.
- A148 JENSEN, An-Magritt. F.5.,K.3.
Når mødre jobber - om nødvendighet og valg (When mothers work -
about necessity and choice). In Kvinner i arbeid (foreløpig
tittel), eds. Kristin D. Titlestad og Tor Rødseth. Oslo-Bergen-
Tromsø, Universitetsforlaget, 1983.
- A149 LIAN, J. I.; and SØRENSEN, K.Ø. C.1.,D.3.,N.
Økonomisk-demografisk modellsystem for regional befolkningsfordeling
(DRØM). Årsrapport for 1982 (Economic-demographic model system for
regional population distribution, Annual report 1982). Interne
notater, No. 83/2. Oslo, Statistisk Sentralbyrå, 1983. 15 pp.
- A150 NIELSSEN, Alf R. D.1.,I.1.
Pest og geografi. Synspunkt på Lars Walløes artikkel Pest og folke-
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(Oslo) 62(2): 216-226. 1983.
- A151 NOACK, Turid. F.1.,F.2.
Fødsler og livsløp (Births and Life Course). In Studier i
kvinner livsløp, eds. Skrede & Tørnes, pp. 139-167. Oslo,
Universitetsforlaget, 1983.
- A152 NOACK, T.; and ØSTBY, Lars. F.1.,F.4.4.
Barnløshet - savn eller ønske? Om ufrivillig og frivillig barn-
løshet (Childless or childfree. About infecundity and intentional
childlessness). Artikler, No. 140. Oslo-Kongsvinger, Statistisk
Sentralbyrå, 1983. 50 pp.
- A153 NOACK, Turid; and ØSTBY, Lars. F.1.,F.4.4.
Childless or Childfree: A Descriptive Study of Sterilization,
Infecundity and Intentional Childlessness. Scandinavian Population
Studies, No. 6. Ed. Peter Springfeldt, pp. 127-146. Stockholm, 1984.
- A154 SELMER, Randi. G.1.,F.1.
Samliv uten vigsel - ekteskap og fødsler (Cohabitation without
marriage, marriage and births). Artikler, No. 146. Oslo-
Kongsvinger, Statistisk Sentralbyrå, 1983. 73 pp.
- A155 STORDAHL, Erik. H.3.
Flyttemønstre. Norge 1971-1974 (Patterns of Migration. Norway
1971-1974). Samfunnsøkonomiske studier, No. 50. Oslo-
Kongsvinger, Statistisk Sentralbyrå, 1983. 238 pp.

- A156 ØSTBY, Lars. F.4.1.,
F.4.5.,G.1.
20 års utvikling i samliv, prevensjon og abort (20 years Development in Cohabitation, Contraception and Abortion). In studier i kvinners livsløp, eds. Skrede og Tornes, pp. 105-138. Oslo, Universitetsforlaget, 1983.
- A157 ØSTBY, Lars. F.4.1.
Prevensjonsbruken i Norge (Contraception in Norway). Tidsskriftet for Den norske Lægeforening (Oslo) 103(26): 1793-1797. 1983.

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- Arbeidsnotat
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