The Use of Administrative Register Data for Longitudinal Studies - Transition of Attainers of Educational Qualifications to Working Life

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In Finland, as well as in the other Nordic Countries, census type statistics are based on register data. Approximately 30 different administrative registers are used in the compilation of census statistics in Finland. The general features of registers are optimum possible coverage and a system for continuous data updating. They cover their pertinent target populations as well as possible. The central population register covers all persons resident in the country, the register of job seekers all unemployed persons, the employment pension register all those having been gainfully employed, the taxation register all income recipients, the student register all students and the register of pensioners all pensioners. The register of buildings and dwellings covers all dwellings and includes up-to-dateable data for linking each resident to the dwelling in which he or she resides.

Apart from the above, there is also a separate register of completed education and degrees in Finland, in which all the post primary and lower secondary educational qualifications and degrees attained by the Finns are recorded. The basic data for this register were collected in the context of the 1970 population census, after which educational institutions have been obliged to update them annually with data on new educational attainments. The register is quite exhaustive but does lack some data on the educational attainments of immigrants. For decades now, data concerning educational attainments have not been collected separately and the data from this register are used instead in all Statistics Finland' s studies, whether relating to total statistics or sample surveys.

As a rule, the data in registers are generally more exhaustive as regards their contents than data collected by census could be. For example, they cover all employment relationships over the past 12 months and overlapping activities, such as simultaneous studying and working as well as simultaneous employment relationships. A further major advantage of the register system is that all the data are obtained every year, not just once every ten years, as is the case with censuses in most countries. Thus, nearly all the population census data are produced in Finland every single year. This annual production was started in 1987 and data concerning the year 2000 are presently being released. The data from the annual population censuses are combined for each individual person, meaning that we have been able to monitor the situations of most Finnish residents for over 13 years now. This unique longitudinal file offers several new study opportunities. We have built completely new statistical systems that are dependent on these longitudinal files that cover the whole population. One example of these is the monitoring of transition from school to work. In addition to this we also have a so-called population census longitudinal file containing population census data for the years 1970, 1975, 1980, 1985, 1990, 1995 and 2000 on all persons resident in Finland during the 1970-2000 period. We have data spanning 30 years on the lifespan, employment, unemployment, changes in educational level, family stages, living conditions, etc. of every Finn.

New student statistics

Most countries want to know their present and future demand for labour force with certain training or qualifications, find out how newly qualified persons find employment and whether their jobs correspond with their training, whether the persons employed find jobs in the localities where they study or do have to move to be able to accept a job and what kinds of income educational attainers of different fields and levels receive. In Finland, we are almost fully able to answer all these questions.

Employment of educated population. Here we have different options. For example, we can study what proportion of all those with nursing qualifications are employed and then compare this to a group with some other educational qualification. We also have quite a comprehensive register of job seekers which can be used to examine the numbers of those with different educational qualifications who are unemployed. There are considerable differences in the employment and unemployment rates between different fields and levels of education. Regardless of the field of education, the employment rate seems to be the better the higher the attained qualification.

Employment of attainers of educational qualifications. Statistics Finland has built up so-called cohorts of attainers of educational qualifications and studied the development of their post-qualification employment with the help of the longitudinal file. An example of this would be a study of the employment rate over the 1987-1999 period of nurses who qualified in 1987. This examination reveals large differences not only between different qualifications but also between different points of time. From 1991 to 1994 Finland suffered from severe economic recession and the examination shows how difficult it is for those who qualified during the recession to find employment and, furthermore, exposes the significant reality that the rate of employment seems to have remained permanently lower among those left without a job at the onset of the recession than among those who qualified before or after the recession. The damage appears difficult to repair. Finding employment varies a great deal by field of educational qualification. The higher the attained degree or qualifications, the wider the geographical area the jobseeking covers. Persons who have qualified from vocational institutes find employment near their home more often than do university graduates, whose jobseeking generally extends over a larger geographical area.

Transition of attainers of educational qualifications to working life. Statistics Finland produces annually so-called transition tables for all vocational institutes and universities. The tables describe the post-education phases, employment, unemployment, further studies, etc. of the completers of education. They show the admissions to universities of completers of upper secondary education, how much those who find employment earn and where they find jobs. Educational institutes can use the data for self-assessment purposes or for comparing their successes with institutes of the same field in the same area. The data contain information on gender, so they can also be used to compare the successes of male and female students. At the university level comparisons are made between faculties and regional universities. University level education is mainly financed by the state in Finland, and these time series also serve as indicators of changes in the efficiency of an educational institute compared to its peers. The data that have become known as transition to work statistics have become a natural measure of efficiency between universities and their faculties and have a direct impact on the resources that are granted to them.

Working whilst studying. Educational institutes are also interested in finding out how much their students work whilst studying. There is much variation in this, too, by region and by field and level of education. Approximately one half of all Finnish university students work whilst pursuing their studies. The majority of students in the technological field do this in the capital region. On the other hand, over one half of the staff of enterprises producing data processing services may be students, which means that the availability of students may be a deciding factor when such an enterprise chooses its location.

Influence of home background. The longitudinal file also contains a link to a person's parents, which makes it possible to study the influence of home background on young peoples' decisions to pursue studies and gainful employment via them. It has been discovered that the home conditions often determine the direction a young person chooses. If the parents are well educated, almost without exception they also try and provide good education for their children and vice versa, the children of parents with low level education very rarely receive high level education.

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RESUME

Un système statistique à base de registres qui fournit les données de recensement annuelles a été développé en Finlande. C'est un excellent fond pour des fichiers longitudinaux qui permettent de suivre le passage des étudiants dans la vie professionnelle et comment ce passage varie selon la discipline et le niveau d'études ainsi que de voir quelles sont les différentes manières de trouver un emploi dans toutes les parties du pays.