FROM THE GUEST EDITOR

The Third Baltic-Nordic Conference on Survey Sampling (BaNoCoSS) was held in June 2011 in a small Swedish village called Norrfällsviken. The conference belongs to a long series of scientific conferences and workshops, which was initiated in 1997 by Professor Gunnar Kulldorff from the University of Umeå. The two previous BaNoCoSS conferences were held Ammarnäs, Sweden and Kuusamo, Finland. Workshops on survey sampling theory and methodology have been organized annually in different Baltic, Nordic and Ukrainian countries by the Baltic-Nordic Network in Survey Sampling. The network has during the last been extended to include also Ukraine. It consists of people from university departments, national statistics institutes and statistical societies of the respective countries. There were 60 participants at this conference from 16 different countries with 45 different contributions or invited speakers.

Statistics in Transition has always been so kind to publish a special issue with a selection of the talks. This journal is a good choice. With the impact of modern technology and the changing society, survey sampling is in rapid transition. When I was a young Ph D student in the seventies I read the book by Cochran. At that time one felt that everything in sampling theory was done and nothing remained. Later, when I got a job at Statistics Sweden in 1975 I had the same feeling. I also felt that traditional sampling was a side track on the tree of statistics and was going to be replaced by the same type of statistics as everywhere else where the observations were modelled as random variables.

On the first issue I was wrong. The computers have given rise to many new possibilities and opportunities. It is now feasible to use more complicated sampling schemes and estimators and also to use much more auxiliary variables. The BaNoCoss conferences are proofs of the vigorous development in modern sampling. At this conference e.g. the keynote speaker Jean Claude Deville talked about the development towards an extensive use of auxiliary variables. But on the second issue I may still be right. Models, random variables and processes are creeping into sampling. The two other keynote speakers were good examples of this. Giovanna Ranalli has taken steps towards integrating traditional methods like kernel estimation into sampling. Steven Thomson has broadened sampling towards spatial and network sampling.

We have selected ten papers in this special issue of *Statistics in Transition* from the 45 topics presented at the BaNoCoSS-conference. Together they show the diversity and the vitality characterising the field of Survey sampling today. When I started at Statistics Sweden I was also struck by the deep cleft between sampling theory and nonsampling errors. Institutes like Bureau of the Census and

people and professor Tore Dalenius were talking about "Total Survey Models" but almost all statisticians worked with one or the other at a time. One might say that the cleft is still there today but some parts are being filled in. In this issue there are e.g. three papers on the technical treatment of non-response. Edgar Bueno Castellanes discusses how to correct for non-response in a Colombian survey. Andre Neri and Giovanna Ranalli discuss the balance between non-response and measurement errors and try to correct for both in the Italian Survey on Household Income and Wealth. Nicklas Pettersson discusses multiple imputation and shows how techniques from kernel estimation can be used there to improve the precision of nonresponse correction.

Another area where models play an important role is estimation for smaller domains. Vilma Nekrasaite considers using panel type data for improving small area estimation by using also previous data and Kari Lumiste is interested in consistent estimation under cross classification. Ari Veijanen and Risto Lehtonen use a mixed model to estimate an income distribution. But to make the estimates to lie closer to survey data the derived distribution is adjusted to bring the percentiles closer to the observed values.

In survey sampling it may sometimes be important to protect the integrity of the respondents. Artem Shcherbina and Maiboroda Rostyslav look at mixtures of populations and try to estimate the components so that the respondents are protected by the mixtures. Dalius Pumputis and Andris Ciginas generalises linear calibration methods to handle also second order functions.

Julia Orlova has made a study to see how statisticians allocate their working time between different working tasks. Anna Larchenko finally advocates that certain statistics should get a higher priority in order to improve the situation for women, mothers and children in Belarus.

I am very proud of this issue, the conference and its mix of contributions, which really lie on the forefront of modern survey sampling. I hope that you will enjoy this issue and that you will be tempted to attend the next conference. It will probably be arranged in four years time. Finally, I want to thank all the authors and referees for their work, the participants of the conference for making it so interesting and finally *Statistics in Transition* for publishing this issue.

Daniel Thorburn
Guest Editor
University of Stockholm