ABSTRACT: Rankings of different populations according to the value of some feature of each population are ubiquitous. Interest in such rankings stem from their ability to convey succinct answers to various questions, such as whether a particular population is “good” or “bad” in terms of the value of this feature relative to other populations, or which populations are “best” or “worst” in terms of the value of this feature. A prominent example from the recent economics literature is provided by Chetty et al. (2014, 2018a, 2018b), in which different populations correspond to different neighborhoods in the United States and the feature by which it is desired to rank them is some measure of intergenerational mobility. A further example of contemporary interest is provided by the Programme for International Student Assessment (PISA), in which different populations correspond to different countries and the feature by which it is desired to rank them is some measure of academic achievement. These rankings are invariably computed using estimates rather than the true values of these features. As a result, there may be considerable uncertainty concerning the rank of each population. In this paper, we consider the problem of accounting for such uncertainty by constructing confidence sets for the rank of each population, which are defined through two distinct coverage properties described in the paper. We show how to construct such confidence sets under weak assumptions. We then apply our methodology to re-examine the rankings of both neighborhoods in the United States according to intergenerational mobility and developed countries in terms performance on the PISA test. We find that the conclusions about which countries do best and worst at reading, math, and science are fairly robust to accounting for uncertainty. By comparison, several celebrated findings about the spatial patterns of income mobility in the United States are not robust to taking uncertainty into account.”

Bio: Magne Mogstad is the Gary S. Becker Professor in Economics and the College in the Kenneth C. Griffin Department of Economics at the University of Chicago, as well as the Director of the Ronzetti Initiative for the Study of Labor Markets at the Becker Friedman Institute at the University of Chicago. His work is motivated by the broad question of how to address market failures and equalize opportunities. Countless policies – taxation, subsidized education, social insurance – have been implemented to achieve those objectives. A key challenge is to distill each policy’s unique impact so that we can understand which ones work and which ones do not. This challenge motivates Magne’s work, which aims at providing credible empirical evidence that informs policymakers. This is made possible by combining theory and econometric methods with large administrative datasets that can be linked to supplementary data sources. Leading the Ronzetti Initiative for the Study of Labor Markets at the Becker Friedman Institute, he investigates how firms, workers, and families are affected by, and adapt to, globalization and technological change, and how the process of restructuring is shaped by labor market institutions and regulations, tax and transfer policies, family policy, and the education system. Magne has published extensively in leading scholarly journals. He is a current co-editor of the Journal of Political Economy, and he previously served as a co-editor of the Journal of Public Economics and a foreign editor of the Review of Economic Studies. He is a recipient of the Alfred P. Sloan Foundation Fellowship and the 2017 IZA Young Labor Economist Award.