





2025 **SWISS STATA CONFERENCE**



PROGRAM

University of Bern

Hallerstrasse 6, 3012 Bern (SWITZERLAND)

November 21, 2025

www.stata.com/meeting/switzerland25

09:00 am Registration

09:25 am Welcome address

09:30 am **Presentation** (30 mn)

Ulrich Kohler (University of Potsdam)

"Step-by-step or all at once: A comparison of multilevel analysis using one-step and two-step approaches"

This presentation discusses advantages of the two-step approach for analyzing hierarchical data. To this end, the parameters of a multilevel model are estimated using the conventional one-step (mixed-effects) approach. The same analysis is then repeated using the two-step approach, with examples that illustrate cases where reliance solely on the one-step method would have led to severe misinterpretations. The presentation also demonstrates the user-written program -twostep- by Giesecke and Kohler (2024).

Giesecke, J., & Kohler, U. (2024). Two-step analysis of hierarchical data. The Stata Journal: Promoting Communications on Statistics and Stata, 24(2), 213-249.

10:00 am **Presentation** (30 mn)

Mark E. Schaffer (Heriot-Watt University)

"Testing overidentification/orthogonality conditions in Stata"

I consider tests of orthogonality conditions in linear and panel data models through the lens of how to avoid the pitfalls of "null hypothesis misspecification testing" (NHMT, Nichols and Schaffer 2022). Tests of orthogonality conditions using the standard Hansen-Sargan J test of overidentification and its relatives are usually dichotomous tests of misspecification: "reject" (or "fail to reject") the orthogonality conditions. But typically the researcher should want to know the practical implications of a rejection. Does it make an important difference to the estimates of the parameters of interest? How precisely is this difference estimated? The artificial regression version of the Hausman test for panel error components models ("fixed vs random effects") is a good example of how this can be done, because the test is expressed in the metric of the parameters of interest. For the standard linear model estimated using IV/GMM, I show how this can be easily implemented in Stata using system estimation of multiple equations with different sets of orthogonality conditions in different specifications that allows the researcher to not only test the orthogonality conditions but also to express and assess potential failures of these conditions in the metric of the parameters.

Nichols, A., M.E. Schaffer (2022). Practical Steps to Improve Specification Testing. P. 75–88 in: N. Ngoc Thach, D.T. Ha, N.D. Trung, V. Kreinovich (eds.). Prediction and Causality in Econometrics and Related Topics.

10:30 am Break

11:00 am **Presentation** (30 mn)

Blaise Melly (University of Bern)

"Causal Detailed Decomposition"

Understanding differences in wage distributions across groups—such as between men and women, or black and white individuals—or tracking changes over time are fundamental economic questions. The Oaxaca/Blinder/Kitagawa decomposition allows us to break down the observed average difference into a part explained by differences in characteristics and an

unexplained component, often interpreted as discrimination. This decomposition carries a causal interpretation under the unconfoundedness assumption. Similar decompositions have been developed to analyze differences in distributions. In this project, we propose new causal detailed decompositions that break down the explained component into contributions from individual characteristics. These detailed decompositions are novel for both average and distributional decompositions. We demonstrate that existing detailed decomposition methods have no causal interpretation.

11:30 am **Presentation** (30 mn)

Philippe Van Kerm (University of Luxembourg)

"Shapley value calculations: Implementation and illustrations"

This talk will illustrate the use of the Shapley-Owen value in regression and various decomposition analyses. It will first introduce the concept of the Shapley value and the related Owen measure for nested structures. It will then describe its use in regression and different types of decomposition analyses and introduce the prefix command shapowen to facilitate implementation of generic calculations of the Shapley-Owen value in Stata.

12:00 am **Lunch**

01:15 pm **Presentation** (1 hour)

Jeff Pitblado (StataCorp)

"Modeling with observed and latent groups"

Stata's estimation commands have evolved in how they accommodate groups. Since the early days, fitting models with group-specific parameters is simply a matter of using the -if- clause to condition on group membership. Hierarchical and partition clustering methods, available in the -cluster- suite of commands, were introduced in Stata 7. Inference between group-specific parameters was made possible with the introduction of -suest- in Stata 8. Factor variables notation was introduced in Stata 11. Stata 12 introduced -sem- and group analysis for Structural Equation Models (SEMs). Stata 15 introduced two kinds of group analysis for generalized SEMs. For observed groups, -gsem- has option -group()-. For latent groups, -gsem- has the -lclass()- option and the ability to perform latent class analysis (LCA). The Finite Mixture Models prefix -fmm- was also introduced in Stata 15. Stata 19 now has the ability to test for the number of latent groups (classes).

02:15 pm **Break**

02:30 pm **Presentation** (30 mn)

 Mukesh Kumar (Indian Institute of Technology), Vikas Poonia (Chaudhary Ranbir Singh University)

"Gender norms and female well-being: An empirical examination"

Based on cultural norms, females during menstruation time are discriminated against, considered impure, and restricted from participating in many rituals. We analyse the relationship between menstruation-related socio-cultural restrictions, period poverty, and well-being using a unique nationally representative microdata of reproductive-age females. Menstrual restrictions and period poverty show strong adverse effects on health and well-

being. One standard deviation (SD) increase in menstruation restriction increases the probability of poor self-reported health and anxiety by 3.4 and 2.2 percentage points (p.p.). Findings are robust to different specifications and the inclusion of a rich set of controls. The findings indicate that menstrual restrictions may have a long-term effect on the health and well-being of females beyond the menstruation period.

03:00 pm **Presentation** (30 mn)

Menggelisha (The World Bank)

"Sources of Long-Term Sustainable Growth and Productivity Developments: A Comparative Analysis, 1950-2023"

This paper constructs an original growth decomposition database covering 130 countries from 1950 to 2023, contributing to the growth accounting literature in three key aspects. First, we refine the traditional concept of TFP by singling out the contributions of capital composition, educational attainment, education quality, innovation output, and technology adoption. Second, we provide a global perspective and a detailed analysis of growth decomposition in emerging and low-income economies, areas largely overlooked in previous studies, with a focus on the comparative performance of income trap escapers and non-escapers. Third, we investigate the underlying drivers of key growth contributors and discuss policy implications for achieving sustainable growth. Our findings suggest that income trap escapers depend more heavily on productivity gains than non-escapers. Specifically, technology factors contribute 9.1% more to growth for escapers of low-income traps compared to non-escapers, while capital efficiency contributes 7.4% more to growth for escapers of middle-income traps. Additionally, we identify market openness, monetary and fiscal stability, and efficient regulatory frameworks as critical strategies for achieving and sustaining long-term economic growth.

03:30 pm **Break**

04:00 pm **Presentation** (30 mn)

Ben Jann (University of Bern)

"crosswalk: A new command for fast and flexible bulk recoding"

In this talk I will present the new -crosswalk- command, a data management utility for fast table-based recoding. The command comes with predefined crosswalk tables for common recoding tasks related to occupational classifications, e.g. to translate ISCO codes (International Standard Classification of Occupations) into ISEI scores (International Socioeconomic Index of Occupational Status), OEP scores (Occupational Earning Potential), or ESeC classes (European Socio-economic Classification). However, it is also easy to define, manipulate, and apply custom recoding tables. In the talk I will briefly explain how -crosswalk-is implemented, present its syntax, and then illustrate its use with some applied examples.

04:30 pm **Presentation** (*30 mn*)

Asjad Naqvi (Austrian Institute for Economic Research)
 "Building a Grammar of Graphics for Stata"

This presentation revisits data visualization in Stata by introducing a new set of modular building blocks designed to enhance flexibility and customizability. While recent years have seen substantial progress in the development of visualization packages, most are maintained by a small set of contributors. By providing the community a set of generic, user-friendly

programs, a modular approach enables the users to create fully customizable visualizations with relatively little coding effort. The presentation will demonstrate some of these modular tools.

05:00 pm **Break**

05:15 pm **Open panel discussion with Stata developers**

06:00 pm **End of conference**

07:00 pm **Conference dinner**

SCIENTIFIC COMMITTEE

Ben Jann (University of Bern), Blaise Melly (University of Bern).



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