NEPS
National Educational Panel Study

Information on Competence Testing

NEPS Starting Cohort 5 — First-Year Students
From Higher Education to the Labor Market

Wave 7: 7th Semester

LIfBi

**LEIBNIZ INSTITUTE FOR
EDUCATIONAL TRAJECTORIES**

Information on the testing	
Test situation	The survey was conducted as an individual test at a location chosen by the participants (mostly in their own home). It was a paper-and-pencil test which consisted of filling out a test booklet. The test session was controlled by a Computer-Assisted-Personal-Interview (CAPI) instrument. Several questions about the target person as well as interviewer questions were integrated into the CAPI instrument.
Test sequence	The test was performed on one day. The test booklet was handed over by the interviewer to the participant. Additionally, they received a fineliner pen. It was allowed to use a pocket calculator provided by the interviewer during the test. In total, 36 multiple-choice questions from the main topics (1.) marketing, (2.) organization/corporate management/personnel, (3.) finance, (4.) accounting, (5.) microeconomics and (6.) macroeconomics had to be answered. For each topic, 6 tasks with 4 possible answers each were set. The maximum processing time was limited to 45 minutes.
Test duration (net processing time of the test booklet)	42.0 minutes
Number of participants	338

The test was developed in cooperation with the WiwiKom project of the University of Mainz. The aim was to adapt the internationally established economic competence tests EGEL (Exámenes Generales de Egreso de la Licenciatura; CENEVAL, 2011) and TUCE (Test of Understanding in College Economics; Walstad, 2007), because there was no German-language instrument that measures economic (professional) competence adequately. The tasks of the used short version were selected by stage 7 with support from the WiwiKom project. The test target group consisted of bachelor students who were close to the end of their studies or already have graduated (see Lauterbach 2015).

In addition to the translations of the original Mexican and US-American instruments, analyses of the curricular structure of Economic courses in Germany were conducted in order to get an overview of the field's central teaching content. A main result of these analyses was the high heterogeneity of the study programs in economics and business administration, despite which there are sufficient agreement of content between the individual disciplines. Afterwards the test items selected up to that point were rated online by experts. They have assessed the individual tasks regarding (1.) the dissemination of the content in the teaching, (2.) the difficulty of the task, (3.) the relevance for the field of study and (4.) the later professional activity as well as (5.) the overall suitability (see Lauterbach 2015).

The dimensionality of the selected tasks was verified using multi-dimensional IRT models (1PL). The internal consistency and the correlations between the content areas indicated that the formation of an overall value of economic competence is permitted. For more details see Lauterbach (2015).

With regard to the processing of the tasks, the participants only differ in whether they have solved a task or not. Additionally, there may be missing values on some tasks if (1) the tasks haven't been completely edited in the limited time of 45 minutes (2) tasks were left out or (3) invalid answers were given. The last tasks from the macroeconomic focus were not achieved by about 30% of the participants. More than 10% haven't edited four tasks from the topic of financing and accounting and only in two cases data are missing due to invalidity. Due to the minor or even non-existent correlations of missing values and the proportion of solved tasks, it emerges that both the omission and the non-achievement of tasks are not taken into account when determining the person's ability (see Lauterbach 2015). The results of all 36 tasks from the test booklet are reported in the Scientific Use File. Moreover, the sum of correct answers and the sum of valid answers are reported, as well as the personal ability as WLE with associated standard error (only related to 34 exercises, for details see Lauterbach (2015)).

Literaturverzeichnis

Lauterbach, Oliver (2015): Erfassung wirtschaftswissenschaftlicher Fachkompetenz von Studierenden in Startkohorte 5 des Nationalen Bildungspanels. Technischer Bericht. Leibniz-Institut für Bildungsverläufe. Bamberg (NEPS Working Paper, 51).