

Electronic supplement from: Ebbinghaus, M.; Dionisius, R.: Company training cooperation agreements. Analyses of areas and patterns of cooperation on the Reference Company System (RCS) (Translation from the German article: Betriebliche Ausbildungskooperationen. Analysen zu Kooperationsbereichen und –mustern auf Grundlage des Referenz-Betriebs-Systems (RBS). In: BWP 49 (2020) 4, pp. 16-20 – URL: www.bwp-zeitschrift.de/de/bwp.php/de/bwp/show/16778)

Table: Patterns of company training cooperation agreements – detailed results of the latent class analyses

	1-class-model	2-class-model	3-class-model	4-class-model
Log likelihood (repeat)	-455.887 (50/50)	-439.750 (50/50)	-433.180 (34/50)	-430.123 (32/50)
AIC	921.774	901.500	900.359	906.246
BIC:	936.410	933.699	950.122	973.573
aBIC	920.592	898.899	896.340	900.809
Entropy	--	0.660	0.911	0.772
Critical boundary estimations	no	no	no	no
Mean class affiliation probability/class size	C 1: 1.000/100%	C 1: 0.850/34% C 2: 0.910/66%	C 1: 0.970/42% C 2: 0.857/12% C 3: 0.973/46%	C 1: 0.831/23% C 2: 0.760/22% C 3: 0.969/30%

Source: RBS 42; N = 138

Explanation/guidance

The three types of company with regard to cooperation patterns presented in the article are based on exploratory latent class analyses (LCA). The aim is to divide investigation units (in this case companies) into sub-groups (latent classes), which were previously unknown (cf. inter alia GEISER 2011).

The number of classes needs to be indirectly determined via comparisons of models with different numbers of classes. Models with one, two, three and four classes were estimated. In accordance with GEISER (2011) and GEISER/OKUN/GRANO (2014), the group of information theory measurements (Information Criteria, IC) used to compare the models comprised Akaike's Information Criteria (AIC), the Bayesian Information Criterion (BIC) and the sample-size adjusted BIC (aBIC). Further criteria included in order to evaluate the quality of the model were the mean class affiliation probabilities in their capacity as indicators of class homogeneity, the entropy as a global measure of reliability of the allocation of companies to classes, and the

presence of boundary estimations. Boundary estimations often indicate that a model is invalid or exhibits too many classes (GEISER 2011, p. 270). Finally, the interpretability of the solution also has a part to play. If the model solution is good, optimum log likelihood should be reproducible, the information criteria should turn out to be comparatively small, the entropy should be comparatively large and assume a value of $> .9$ if possible, critical boundary estimations should not be present and the mean class affiliation probabilities should exhibit high values of $> .8$ if possible.

The table indicates the parameters for the four models estimated. The best parameters in each case are highlighted in bold type.