

Operationalisation and regression

Table 1

Precise wording of the questions in the BIBB Training Panel

Participation in continuing vocational education and training	
All companies:	In 2014, have employees from your company taken part in other CVET measures in the form of internal or external courses or programmes which were funded by your company in whole or in part by means of release from work duties or assumption of costs? (yes/no)
If yes:	What was the total of employees who took part in one or more of these CVET measures in 2014? (Number of employees)
	And how were these employees distributed across the employee groups performing unskilled, skilled and highly skilled tasks? (number of CVET participants performing unskilled/skilled/highly skilled tasks)
Level of task requirements of the employees or CVET participants	
All companies:	<p>Employees performing <i>unskilled</i> tasks that usually do not require vocational education and training.</p> <p><i>We understand these to include</i></p> <ul style="list-style-type: none"> • tasks which e.g. encompass simple cleaning, waste removal, warehousing and transport works or simple sales activities • and which usually, although not necessarily always, require completion of company-based or school-based VET or relevant occupational experience and are, for example, performed by skilled workers or specialist commercial clerks. <p>Employees performing <i>skilled</i> tasks that usually require completion of vocational education and training or relevant occupational experience.</p> <p><i>We understand these to include</i></p> <ul style="list-style-type: none"> • tasks in which e.g. products and goods are manufactured, tasks in which repair and maintenance works are carried out in a qualified manner or tasks which involve qualified services such as commercial activities or IT work • and which usually, although not necessarily always, require completion of company-based or school-based VET or relevant occupational experience and are, for example, performed by skilled workers or specialist commercial clerks. <p>Employees performing <i>highly skilled</i> tasks that usually require a degree from an institute of higher education/university of applied sciences or a master craftsperson, technician or comparable qualification.</p> <p><i>We understand these to include</i></p> <ul style="list-style-type: none"> • tasks which e.g. encompass research, development, analytical, consultancy and construction works or management, training and organisational responsibilities • and which usually, although not necessarily always, require a degree from an institute of higher education/university of applied sciences or a master craftsperson, technician or comparable qualification and which are, for example, performed by certified senior clerks, group leaders, scientists, master craftspersons or managers.

Coverage by a collective bargaining agreement and CVET agreement

All companies:	Is a sectoral, in-house or company collective bargaining agreement in place at your company? <ul style="list-style-type: none"> A sectoral agreement (yes/no) An in-house or company agreement (yes/no)
If yes:	Which of the following agreements is included in the sectoral, in-house or company collective bargaining agreement in place at your company? (several items, among others) <ul style="list-style-type: none"> Agreements relating to the promotion of CVET (yes/no)

Table 2

Sample description

	N	Min	Max	Mean	Std. Dev.
CVET participation (0/1)	2,090	0	1	0.931	0.253
CVET rate (share):					
Employees performing					
unskilled tasks	1,445	0	1	0.211	0.344
skilled tasks	1,929	0	1	0.456	0.350
highly skilled tasks	1,763	0	1	0.430	0.390
CVET agreement	2,090	0	1	0.482	0.500
Company size category	2,090	1	4	3.010	1.110
Sector	2,090	1	8	5.149	2.304
Company providing apprenticeship training	2,090	0	1	0.684	0.465
Works council	2,090	0	1	0.725	0.446
Company located in western Germany	2,090	0	1	0.749	0.434
Share of employees unskilled tasks	2,090	0	1	0.184	0.251
Share of employees highly skilled tasks	2,090	0	1	0.223	0.229
Introduction of technology	2,090	0	1	0.454	0.498

Source: BIBB Training Panel 2015, companies covered by a collective bargaining agreement, unweighted.

Table 3

Results of the multivariate regression

	1	2	3	4
	CVET participation (0/1)	CVET rate (share): Employees performing ... tasks		
		unskilled	skilled	highly skilled
CVET agreement	0.301**	0.039**	0.062***	0.076***
Company size (reference – 200 or more employees)				
1 to 19 employees	-0.073***	-0.081**	0.087***	0.098***
20 to 99 employees	-0.022	0.013	0.033	-0.051**
100 to 199 employees	-0.025	0.002	-0.023	-0.014
Sector (reference – manufacturing industry)				
Primary sector	0.057*	0.103*	0.141***	0.134***
Construction industry	-0.032	-0.065	-0.066	-0.050
Trade and repair sector	0.025	-0.096**	0.061*	-0.051
Company-related services	0.033	-0.082***	0.076***	0.028
Other personal services	0.052**	-0.028	0.060*	0.020
Medical services	0.068***	0.057**	0.173***	0.111***
Public services	0.068***	-0.071**	0.079***	0.070**
Company providing apprenticeship training	0.038***	-0.054**	0.010	-0.049**
Works council	0.040***	0.020	0.064***	0.079***
Company located in western Germany	0.018	-0.027	-0.012	-0.014
Share of employees unskilled tasks	-0.077***	0.072*	-0.022	-0.062
Share of employees highly skilled tasks	-0.013	0.038	0.111***	0.122***
Introduction of technology	0.021*	0.027	0.019	0.021
n	2.090	1.445	1.929	1.763

Source: BIBB Training Panel 2015, companies covered by a collective bargaining agreement. Column 1: logistic models, average marginal effects; Column 2 to 4: linear models; ***, **, * significant at the 1-percent, 5-percent, 10-percent level of significance. In order to secure the regression results, further regression models applying different approaches were estimated in order to take into account potential endogeneity problems. The outcomes of these entropy balancing and regression adjustment models show robust results for the key correlations.