

## Determinants of training incidence: model specifications

Variables	Years											Model specifications					
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	1	2	3	4	5
Further training(Yes/No)*													√	√	√	√	√
Number of employees													√	√	√	√	√
Percentage part-time													√	√	√	√	√
Percentage unskilled													√	√	√	√	√
Percentage temporary workers													√	√	√	√	√
Business volume													√	√	√	√	√
Investment previous year													√	√	√	√	√
New technology													√	√	√	√	√
Old technology													√	√	√	√	√
Industry sectors													√	√	√	√	√
Work councils													√	√	√	√	√
Percentage apprentices													√	√	√	√	√
Collective wage agreement														√	√	√	√
Team working															√	√	√
Founded before 1990															√	√	√
West East Germany																√	√
Good profitability																	√
Poor profitability																	√
Restrictions: in addition to private sector																	
Specification 1	West only																
Specification 2	West only																
Specification 3	West only																
Specification 4	West and East																
Specification 5	West, East																

\* Dependent variable; Further training provided Yes/No

**Table 1: Empirical findings: training incidence, probit estimates, marginal effects**

Marginal effects, probit estimates	Specification 1			Specification 2			Specification 3			Specification 4					Specification 5														
	dy/dx	West P> t		dy/dx	West P> t		dy/dx	West P> t		dy/dx	4. West P> t		dy/dx	4.1 East P> t		dy/dx	5. West P> t		dy/dx	5.1 East P> t									
Number employees	0.002	0.000	***	0.003	0.000	***	0.003	0.000	***	0.003	0.000	***	0.002	0.000	***	0.003	0.000	***	0.004	0.000	***								
Proportion apprentices	1.93	0.000	***	1.73	0.000	***	1.63	0.000	***	1.63	0.000	***	0.65	0.000	***	1.81	0.000	***	0.75	0.000	***								
Proportion unskilled	-0.70	0.000	***	-0.84	0.000	***	-0.86	0.000	***	-0.85	0.000	***	-0.56	0.000	***	-0.78	0.000	***	-0.67	0.000	***								
Proportion part time	-0.29	0.000	***	-0.30	0.000	***	-0.24	0.001	***	-0.26	0.001	***	-0.16	0.087		-0.36	0.000	***	-0.25	0.015	**								
Proportion fixed term contracts	0.73	0.000	***	0.56	0.000	***	0.55	0.000	***	0.60	0.000	***	0.25	0.030	**	0.45	0.009	**	0.17	0.232									
Business volume	0.003	0.000	***	0.004	0.000	***	0.004	0.000	***	0.004	0.000	***	0.014	0.000	***	0.005	0.000	***	0.008	0.000	***								
Investment in EURO	-0.002	0.711		-0.003	0.588		-0.004	0.493		-0.005	0.381		0.058	0.000	***	-0.005	0.420		0.061	0.001	***								
New technology	0.38	0.000	***	0.38	0.000	***	0.36	0.000	***	0.38	0.000	***	0.36	0.000	***	0.38	0.000	***	0.35	0.000	***								
Old technology	-0.24	0.000	***	-0.23	0.001	***	-0.21	0.007	***	-0.23	0.004	***	-0.32	0.000	***	-0.23	0.005	***	-0.38	0.000	***								
Work councils	1.29	0.000	***	1.02	0.000	***	1.00	0.000	***	0.96	0.000	***	0.96	0.000	***	0.90	0.000	***	0.79	0.000	***								
Collective wage agreements				0.28	0.000	***	0.26	0.000	***	0.24	0.000	***	0.33	0.000	***	0.20	0.000	***	0.30	0.000	***								
Team working							0.65	0.000	***	0.68	0.000	***	0.56	0.000	***	0.67	0.000	***	0.56	0.000	***								
Established before 1990										0.09	0.020	**	-0.13	0.001	***	0.06	0.140		-0.17	0.000	***								
Good profitability																0.18	0.000	***	0.09	0.028	***								
Poor profitability																-0.01	0.790		-0.14	0.001	***								
West Germany																													
Agriculture	-0.41	0.001	***	-0.28	0.023	**	-0.27	0.040	**	-0.26	0.045	**	0.05	0.670		-0.32	0.018	**	0.06	0.614									
Mining	0.34	0.024	**	0.36	0.025	**	0.37	0.031	**	0.32	0.060	*	0.14	0.461		0.20	0.238		0.24	0.226									
Construction	-0.30	0.000	***	-0.33	0.000	***	-0.32	0.000	***	-0.29	0.000	***	-0.33	0.000	***	-0.26	0.000	***	-0.29	0.000	***								
Trade	0.15	0.004	***	0.19	0.001	***	0.18	0.002	***	0.18	0.001	***	0.26	0.000	***	0.21	0.000	***	0.31	0.000	***								
Communication	-0.17	0.037	**	-0.13	0.140		-0.15	0.093		-0.12	0.157		-0.16	0.202		-0.11	0.195		-0.17	0.172									
Finance	0.87	0.000	***	0.89	0.000	***	0.88	0.000	***	0.86	0.000	***	0.05	0.858	***	0.84	0.000	***	0.24	0.352									
Services	0.51	0.000	***	0.60	0.000	***	0.59	0.000	***	0.58	0.000	***	0.44	0.000	***	0.48	0.000	***	0.33	0.000	***								
<b>Number of observations</b>	<b>26,473</b>			<b>24,090</b>			<b>21,825</b>			<b>19,368</b>					<b>15,504</b>					<b>17,439</b>					<b>13,631</b>				

Note: Highlighted when differences between East and West Germany found; \*, \*\* and \*\*\*, significant at 10,5 and 1% level of significance.

**Table 3: Empirical findings, determinants of training intensity (number of trained workers)**

Explanatory variables	West		West		East		East	
	Unconditional	MFX	Unconditional	MFX	Unconditional	MFX	Unconditional	MFX
Number of employees	0.14	***	0.11		0.12	***	0.09	
Proportion apprentices	21.67	***	16.40		-3.67		-2.77	
Proportion unskilled	-26.07	***	-19.72		-13.71	***	-10.34	
Proportion part time	-8.67	***	-6.56		-1.33		-1.01	
Proportion fixed term contracts	7.21		5.46		6.09	***	4.59	
Business volume	-0.0022	***	-0.0017		0.03	***	0.02	
Investment in EURO	0.27	***	0.21		0.02	***	0.01	
New technology	4.76	***	3.62		2.39	***	1.81	
Old technology	-0.04		-0.03		-1.65		-1.26	
Work councils	4.59	***	3.46		2.17	***	1.62	
Collective wage agreements	2.07	*	1.57		3.38	***	2.53	
Team working	1.93		1.45		3.34	***	2.47	
Established before 1990	-0.49		-0.37		-0.93	*	-0.70	
Good profitability	0.92		0.69		0.34		0.26	
Poor profitability	0.87		0.66		-0.02		-0.02	
ICT investment	7.18	***	5.46		3.79	***	2.86	
Investment foreseen	7.56	***	5.77		4.28	***	3.27	
Agriculture	-1.37		-1.04		-1.57		-1.20	
Mining	-7.22	*	-5.63		-4.20	**	-3.29	
Construction	-1.29		-0.98		-3.06	***	-2.35	
Trade	7.16	***	5.35		2.80	***	2.08	
Communication	2.35		1.77		-1.56		-1.19	
Finance	26.43	***	19.03		0.30		0.23	
Services	7.24	***	5.43		1.82	***	1.36	
<b>Observation summary (total)</b>	<b>9,385.00</b>				<b>8,085</b>			
Left-censored observations	3,838.00				3,525			
Un-censored observations	5,547.00				4,560			
Right-censored observations	-				-			

Note: Highlighted when differences between East and West Germany found; \*, \*\* and \*\*\*, significant at 10,5 and 1% level of significance.

Table 3.1 Quantifying the influence of technological change on training intensity

Dependent variable:	West		East	
	No. workers <sup>a</sup>	% trained <sup>b</sup>	No. workers <sup>a</sup>	% trained <sup>b</sup>
<b>Median number of employees</b>	<b>34</b>		<b>21</b>	
<b>All establishments</b>				
<b>Unconditional MFX: additional number/share of workers receiving training due to:</b>				
Volume of investment in million EUROS	0.27			
New technology	4.76	0.04	2.39	0.05
Old technology		-0.02		-0.03
ICT investment	7.18	0.05	3.79	0.05
Investments foreseen	7.56	0.04	4.28	0.06
<b>Only establishments that provided training</b>				
<b>Conditional MFX: additional number/share of workers receiving training due to:</b>				
Volume of investment in million EUROS <sup>c</sup>	0.21			
New technology	3.62	0.03	1.81	0.03
Old technology		-0.02		-0.02
ICT investment	5.46	0.04	2.86	0.04
Investments foreseen	5.77	0.03	3.27	0.05
<b>Number of observations</b>	<b>9,385</b>		<b>8,085</b>	

a/b) the dependent variable is number/share of workers that have received training during the first half of the year.