

Manufacture of motor vehicles, trailers and semi-trailers; Count	1	0	0	0	0	0	0	0	2	4.47	0.00	0.00	0.00	0.00	0.00	0.00	5.74
Manufacture of other non-metal goods; Count	10	12	10	9	6	6	6	6	6	2.40	2.88	2.13	1.82	1.06	1.25	1.15	1.15
Manufacture of pulp and paper, publishing and printing; Count	3	3	3	2	2	2	2	2	2	1.61	1.14	1.49	1.16	0.81	0.49	0.46	0.46
Manufacture of rubber and plastics; Count	1	4	4	4	6	6	6	6	6	0.50	1.73	1.55	1.09	1.19	1.21	1.06	1.06
Manufacture of transport equipment; Count	0	0	1	4	7	18	18	18	18	0.00	0.00	0.17	0.52	1.19	3.52	3.33	3.33
Manufacture of wood and wooden products; Count	1	1	1	1	1	1	1	1	1	1.92	1.62	1.55	2.55	1.46	1.56	1.44	1.44
Mining and quarrying; Count	2	2	3	3	3	3	2	2	2	6.71	8.63	9.28	9.58	7.03	5.00	4.59	4.59
Other community, social and personal service activities; Count	1	1	1	1	3	2	2	3	3	3.36	4.31	4.13	2.39	1.80	1.09	1.50	1.50
Real estate, rental and business activities; construction; Count	2	1	1	0	1	2	2	2	2	1.49	0.72	0.59	0.00	0.47	0.42	0.41	0.41
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods; Count	2	7	6	5	5	0	0	0	0	0.89	3.24	2.65	1.45	1.95	0.00	0.00	0.00
Transport, storage and communication; Count									1								0.27
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; Count	1	0	0	2	1	5	5	5	5	0.38	0.00	0.00	0.59	0.27	0.54	0.51	0.51
Total:	64	69	75	77	94	92	95	95									

Kujawsko-Pomorskie

Financial intermediation; Count	0	0	0	1	1	0	0	0	0	0.00	0.00	0.00	0.54	0.59	0.00	0.00	0.00
Manufacture of chemicals and chemical products; Count	1	0	0	1	2	1	2	2	2	0.84	0.00	0.00	0.77	1.18	0.85	1.23	1.23
Manufacture of electrical machinery and apparatus; Count	0	0	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	0.00	0.00	1.01	1.01
Manufacture of fabrics and textiles; Count	0	0	0	0	1	1	1	1	1	0.00	0.00	0.00	0.00	1.28	1.95	1.52	1.52
Manufacture of food, drinks and tobacco products; Count	6	5	6	7	8	6	7	7	7	2.07	2.27	2.79	2.86	2.69	2.98	2.57	2.57

Continued

Appendix 1 Continued

	Number of Firms										RLAIs Index					
	886	906	978	996	1101	1150	1091	2000	2001	2000	2001	2002	2003	2004	2005	2006
All Firms Total																
Activities (PKD)																
manufacture of furniture and consumer goods Count	1	1	1	0	1	0	0	2.48	2.80	2.48	3.20	0.00	2.65	0.00	0.00	
Manufacture of leather and leather products; Count	1	1	1	1	1	0	0	7.03	8.39	7.03	10.87	8.30	7.06	0.00	0.00	
Manufacture of metals and metal products; Count	2	2	3	2	2	2	2	1.88	2.19	1.88	3.33	2.03	1.46	1.92	1.42	
Manufacture other non-metal goods and plastics Count	1	1	1	1	0	0	0	0.75	0.83	0.75	0.00	0.79	0.00	0.00	0.00	
Manufacture of pulp and paper, publishing and printing; Count	3	3	3	2	4	4	4	5.06	6.29	5.06	6.52	4.53	5.84	4.75	3.64	
Manufacture of radio, television and communication equipment and apparatus; Count	0	0	0	0	0	0	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.58	
Manufacture of rubber and plastics; Count	1	1	1	1	2	1	1	1.56	1.68	1.56	1.70	1.06	1.44	0.98	0.70	
Manufacture of transport equipment; Count	1	1	1	1	1	1	1	0.64	0.69	0.64	0.73	0.50	0.61	0.95	0.73	
Manufacture of wood and wooden products; Count	1	1	1	1	1	1	1	6.03	6.29	6.03	6.79	9.96	5.29	7.57	5.68	
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; Count	3	2	1	2	2	2	3	3.62	3.25	3.62	1.81	2.32	1.97	1.05	1.21	
Total:	21	18	18	20	26	19	24									
	Łódzkie															
Automotive Count	1	1	1	1	1	0	0	0.29	0.29	0.29	0.24	0.21	0.25	0.00	0.00	
Financial intermediation; Count	2	2	2	1	2	1	1	1.98	2.11	1.98	1.25	0.22	0.37	0.22	0.19	
Construction; Count	1	2	0	0	0	0	0	0.45	1.05	0.45	0.00	0.00	0.00	0.00	0.00	
Manufacture of chemicals and chemical products; Count	4	4	8	4	7	9	10	1.51	1.56	1.51	2.50	1.25	1.65	2.24	2.17	
Manufacture of consumer products Count	0	0	0	3	1	0	0	0.00	0.00	0.00	0.00	7.62	1.88	0.00	0.00	

Manufacture of electrical machinery and apparatus; Count	1	1	1	0	0	0	0	0	0.54	0.62	0.53	0.00	0.00	0.00	0.00	0.00
Manufacture of fabrics and textiles; Count	8	7	9	4	11	9	9	5.39	5.90	5.43	3.13	5.65	5.14	4.81		
Manufacture of food, drinks and tobacco products; Count	7	5	5	4	5	7	7	1.08	0.95	0.77	0.67	0.67	1.02	0.91		
Manufacture of leather and leather products; Count	1	1	1	1	1	1	1	3.14	3.51	3.62	3.39	2.82	2.95	2.67		
Manufacture of machinery and equipment; Count	1	1	2	0	3	4	4	0.70	0.78	1.29	0.00	1.15	1.68	1.53		
Manufacture of metals and metal products; Count	1	1	2	2	2	2	2	0.42	0.46	0.74	0.83	0.58	0.56	0.50		
Manufacture of other non-metal goods; Count	6	8	7	9	11	10	11	2.02	2.76	2.19	2.90	2.82	2.95	2.94		
Manufacture of pulp and paper, publishing and printing; Count	3	3	4	4	3	3	3	2.26	2.63	2.90	3.87	1.75	1.04	0.96		
Manufacture of rubber and plastics; Count	3	3	4	4	6	7	7	2.09	2.11	2.26	1.73	1.72	2.00	1.73		
Manufacture of transport equipment; Count	2	0	0	0	1	1	1	0.57	0.00	0.00	0.00	0.25	0.28	0.26		
Other community, social and personal service activities; Count	0	1	1	2	2	2	2	0.00	7.02	6.04	2.54	2.61	1.54	1.40		
Real estate, rental and business activities; Count	0	0	2	1	1	2	2	0.00	0.00	1.72	0.92	0.68	0.60	0.57		
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods; supporting and auxiliary transport activities; Count	3	0	1	5	4	0	0	1.89	0.00	0.65	2.31	2.26	0.00	0.00		
Transport, storage and communication; Count					2	2	2					0.79	0.80	0.76		
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; Count	2	1	1	2	2	5	6	1.08	0.68	0.60	0.95	0.79	0.77	0.85		
Total:	46	41	51	47	65	65	68									

Lubelskie

Agriculture; Count	0	1	0	0	0	0	0	0.00	2.10	0.00	0.00	0.00	0.00	0.00		
Automotive /Manufacture of transport equipment; Count	1	1	1	0	0	0	0	0.89	0.78	1.02	0.00	0.00	0.00	0.00		
Capital investment; Count	1	1	0	0	0	0	0	3.11	2.83	0.00	0.00	0.00	0.00	0.00		

Continued

Appendix 1 Continued

	Number of Firms										RLAIs Index				
	886	906	978	996	1101	1150	1091	2000	2001	2002	2003	2004	2005	2006	
All Firms Total															
Activities (PKD)															
Hotels and restaurants; Count	1	1	0	0	0	0	0	2.68	2.98	0.00	0.00	0.00	0.00	0.00	
Health and social work; manufacture of food, drinks and tobacco products; Count	0	0	0	1	0	1	1	0.00	0.00	0.00	0.72	0.00	67.65	68.19	
Manufacture of chemicals and chemical products; Count	0	0	0	1	2	1	1	0.00	0.00	0.00	1.09	1.91	0.95	0.92	
Manufacture of food, drinks and tobacco products; Count	3	3	3	3	3	2	2	1.45	1.53	1.93	1.75	1.64	1.11	1.10	
Manufacture of furniture and consumer goods; Count	1	1	1	1	1	1	1	3.47	3.15	4.43	4.18	4.30	2.71	2.62	
Manufacture of machinery and equipment; Count	0	0	0	1	2	2	2	0.00	0.00	0.00	1.92	3.13	3.22	3.25	
Manufacture of metals and metal products; Count	1	1	1	0	0	1	1	1.31	1.23	1.54	0.00	0.00	1.07	1.07	
Manufacture of other non-metal goods; Count	2	2	1	2	2	1	1	2.11	1.86	1.30	2.26	2.09	2.25	1.14	
Manufacture of parts and accessories for motor vehicles and their engines; Count	0	0	0	1	0	0	0	0.00	0.00	0.00	71.14	0.00	0.00	0.00	
Manufacture of pharmaceuticals; Count	0	0	1	0	0	0	0	0.00	0.00	8.36	0.00	0.00	0.00	0.00	
Manufacture of pulp and paper, publishing and printing; Count	1	1	1	1	1	1	1	2.36	2.36	3.01	3.39	2.37	1.33	1.36	
Manufacture of rubber and plastics; Count	2	2	2	2	2	3	3	4.38	3.78	4.70	3.03	2.33	3.27	3.15	
Manufacture of transport equipment; Count	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	1.00	1.06	1.10	
Manufacture of wood and wooden products; Count	1	1	1	0	1	1	1	8.44	7.08	9.40	0.00	8.60	8.46	8.52	
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; Count	1	1	1	1	1	1	1	1.69	1.83	2.51	1.65	1.60	0.59	0.60	
Total:	15	16	13	14	16	17	16								

	Lubuskie																	
Financial intermediation; Count	1	1	1	1	1	1	1	1	1	1	1	1.77	2.16	1.77	0.54	0.50	0.64	0.58
Hotels and restaurants; Count	0	1	1	1	1	1	1	1	1	1	1	2.57	2.27	2.57	2.37	2.09	2.27	2.16
Manufacture of chemicals and chemical products; Count	0	2	2	2	2	1	1	0	0	0	0	1.77	1.60	1.77	1.53	1.27	0.74	0.67
Manufacture of fabrics and textiles; Count	5	4	4	3	4	4	10.55	6.90	6.86	5.75	5.56	6.74	6.61					
Manufacture of food, drinks and tobacco products; Count	1	2	2	3	4	3	4	0.48	0.78	0.88	1.22	1.46	1.29	1.60				
Manufacture of leather and leather products; Count	1	3	2	2	2	2	9.84	21.57	20.59	16.60	15.29	17.42	16.53					
Manufacture of metals and metal products; Count	0	0	0	0	1	0	0	0	0	0	0	0.79	0.00	0.00				
Manufacture of other non-metal goods; Count	2	2	2	2	2	3	2.11	1.41	1.77	1.58	1.39	2.61	1.65					
Manufacture of pulp and paper, publishing and printing; Count	1	2	2	2	2	2	2.36	3.60	4.12	4.74	3.16	2.05	1.98					
Manufacture of rubber and plastics; Count	0	0	0	1	2	2	0	0	0	0	1.06	1.56	1.69	1.53				
Manufacture of transport equipment; Count	2	1	1	1	1	1	1.79	0.59	0.70	0.50	0.66	0.82	0.80					
Manufacture of wood and wooden products; Count	1	1	1	1	1	1	8.44	5.39	6.43	9.96	5.73	6.53	6.20					
Transport, storage and communication; Count	0	1	1	1	1	1	0	0	0	0	0	0	0					
Wholesale trade, automotive; Count	1	1	0	0	0	0	1.69	1.39	0.00	0.00	0.00	0.00	0.00					
Total:	15	21	19	20	24	22												

	Matopolskie													
Automotive; Count	1	2	3	1	1	0	0.38	0.71	0.97	0.26	0.35	0.00	0.00	
Business activities; Count	1	1	1	1	1	0	3.62	2.59	2.39	1.46	1.11	0.00	0.00	
Construction; Count	3	2	3	2	2	2	1.77	1.29	1.52	1.38	1.14	1.30	1.24	
Electricity, gas and water supply; Count	1	1	2	1	2	2	1.81	1.52	1.83	1.09	1.96	1.93	1.86	
Manufacture of chemicals and chemical products; Count	3	3	3	4	4	3	1.52	1.44	1.23	1.61	1.36	1.19	1.05	
Manufacture of fabrics and textiles; Count	0	0	0	0	1	1	0	0	0	0	0	0.74	0.90	1.73
Manufacture of food, drinks and tobacco products; Count	5	4	5	5	5	3	4	1.04	0.93	1.02	1.07	0.97	0.69	0.84

Continued

Appendix I Continued

	Number of Firms										RLAIs Index					
	886	906	978	996	1101	1150	1091	2000	2001	2002	2003	2004	2005	2006		
All Firms Total																
Activities (PKD)	6	6	6	6	8	6	7	3.38	3.38	2.92	3.21	3.37	2.67	2.84		
Manufacture of metals and metal products; Count	5	6	5	4	4	4	4	2.26	2.55	2.06	1.66	1.48	1.87	1.73		
Manufacture of other non-metal goods; Count	1	3	3	1	2	2	2	1.01	3.24	2.86	1.25	1.69	1.10	1.04		
Manufacture of pulp and paper, publishing and printing; Count	1	1	1	3	3	4	4	0.94	0.86	0.75	1.67	1.24	1.81	1.60		
Manufacture of rubber and plastics; Count	0	0	0	1	1	0	0	0.00	0.00	0.00	0.26	0.35	0.00	0.00		
Manufacture of transport equipment; Count	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	4.89	5.61	5.20		
Mining and quarrying; Count	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Other community, social and personal service activities; Count	0	0	0	1	1	1	1	0.00	0.00	0.00	1.64	1.53	1.22	1.13		
Real estate, rental, and business activities; Count	3	1	4	3	3	3	3	4.22	1.44	4.54	3.57	2.94	1.43	1.39		
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; Count	5	5	5	5	6	9	7	3.62	4.18	3.98	3.05	3.41	2.20	1.61		
Total:	35	35	41	38	45	41	42									
	Mazowieckie															
Business activities Count	5	8	22	0	14	0	0	2.28	2.21	5.63	0.00	1.70	0.00	0.00		
Construction; Count	20	20	26	26	28	27	28	1.38	1.42	1.83	1.74	1.71	1.70	1.70		
Distribution of petroleum products, retail trade; Count	2	4	4	2				0.80	1.38	1.71	2.67	0.00	0.00	0.00		
Electricity, gas and water supply; Count	22	4	7	2	5	2	3	5.03	0.65	0.69	1.78	3.35	0.19	0.27		
Financial intermediation; Count	26	45	68	76	74	63	70	4.38	6.21	8.70	2.18	2.18	2.09	2.10		
Hotels and restaurants; Count	11	11	14	15	16	15	15	1.60	1.60	1.79	1.91	1.95	1.78	1.67		
Manufacture of chemicals and chemical products; Count	20	24	23	32	29	30	27	1.28	1.23	1.02	1.31	1.08	1.15	0.93		
Manufacture of consumer products; Count	5	5	4	3	2			1.45	1.26	1.14	1.00	0.60	0.00	0.00		

Manufacture of electrical machinery and apparatus; Count	13	12	14	13	17	16	14	1.19	0.97	1.05	1.02	1.08	0.99	0.79
Manufacture of fabrics and textiles; Count	6	6	7	3	3	3	3	0.69	0.66	0.60	0.31	0.24	0.26	0.26
Manufacture of food, drinks and tobacco products; Count	32	34	34	29	28	34	31	0.84	0.85	0.74	0.63	0.60	0.76	0.64
Manufacture of furniture and consumer goods; Count	3	1	1	1	1	5	5	0.56	0.15	0.15	0.16	0.17	0.55	0.49
Manufacture of leather and leather products; Count	0	0	0	1	1	1	1	0.00	0.00	0.00	0.45	0.45	0.45	0.43
Manufacture of machinery and equipment; Count	8	8	6	9	9	10	10	0.95	0.82	0.55	0.65	0.55	0.65	0.61
Manufacture of metals and metal products; Count	5	6	8	9	10	10	10	0.36	0.36	0.42	0.49	0.46	0.43	0.40
Manufacture of other non-metal goods; Count	12	12	12	14	13	9	9	0.69	0.54	0.53	0.59	0.53	0.41	0.38
Manufacture of pharmaceuticals Count	0	0	6					0.00	0.00	1.71	0.00	0.00	0.00	0.00
Manufacture of pulp and paper; publishing and printing; Count	20	21	23	31	29	29	28	2.56	2.42	2.36	3.94	2.68	1.55	1.43
Manufacture of radio, television and communication equipment and apparatus; Count telecommunications	0	9	10				1	0.00	1.91	1.71	0.00	0.00	0.00	0.43
Manufacture of rubber and plastic products; Count	5	4	5	7	10	8	10	0.59	0.37	0.40	0.40	0.45	0.35	0.39
Manufacture of transport equipment; Count	4	5	4	3	4	9	9	0.19	0.19	0.14	0.08	0.16	0.38	0.37
Media and entertainment Count	3	21	7	4				1.07	6.45	1.63	2.67	0.00	0.00	0.00
Mining and quarrying; Count	1	1	1	1	1	1	1	0.80	0.92	0.64	0.67	0.54	0.55	0.51
Other community, social and personal service activities; Count	2	4	3	5	19	11	10	3.20	2.76	1.10	0.83	3.18	1.30	1.11
Postal services; Count	3	1	5	2				9.60	2.76	2.13	2.67	0.00	0.00	0.00
Electricity, gas and water supply; Count	1	1	1	5				0.23	0.16	0.10	0.56	0.00	0.00	0.00
Real estate, rental and business activities; Count	7	9	10	13	16	38	38	1.24	1.38	1.22	1.58	1.71	1.76	1.73
Retail trade; Count	21	25	31	33	43	23	24	2.24	2.47	2.83	2.00	3.84	1.39	1.46
Transport, storage and communication; Count					22	23	24							
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; Count	16	16	13	14	17	55	56	1.46	1.43	1.11	0.87	1.06	1.30	1.27
Total:	273	317	369	353	411	422	427							

Continued

Appendix I Continued

	Number of Firms						RLAis Index							
	886	906	978	996	1101	1150	1091	2000	2001	2002	2003	2004	2005	2006
All Firms Total														
Activities (PKD)														
	Opolskie													
Manufacture of chemicals and chemical products; Count	2	1	1	1	1	2	2	2.22	1.05	0.99	0.85	0.76	1.47	1.34
Manufacture of fabrics and textiles; Count	1	1	1	1	1	1	1	1.98	2.27	1.92	2.13	1.67	1.69	1.65
Manufacture of food, drinks and tobacco products; Count	2	3	5	6	5	6	6	0.91	1.53	2.46	2.72	2.18	2.57	2.40
Manufacture of machinery and equipment; Count	1	1	2	2	1	1	2	2.05	2.10	4.11	2.99	1.25	1.24	2.36
Manufacture of metals and metal products; Count	3	3	2	2	4	4	4	3.69	3.69	2.35	2.26	3.80	3.32	3.10
Manufacture of other non-metal goods; Count	2	1	3	4	4	4	3	1.98	0.93	2.98	3.51	3.34	3.48	2.48
Manufacture of transport equipment; Count	1	1	0	0	2	2	2	0.84	0.78	0.00	0.00	1.60	1.63	1.50
Mining and quarrying; Count	1	1	1	0	0	0	0	13.84	18.88	14.38	0.00	0.00	0.00	0.00
Real estate, rental and business activities; Count	2	2	0	0	1	1	1			0.00	0.00	2.20	0.89	0.89
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; Count	1	2	2	2	1	1	1	1.58	3.65	3.84	2.57	1.28	0.45	0.44
Total:	16	16	17	18	20	22	22							
	Podkarpackie													
Electricity, gas and water supply; Count	3	2	0	1	1	1	1	9.49	4.26	0.00	13.28	9.83	1.47	1.34
Manufacture of chemicals and chemical products; Count	4	4	4	4	5	3	4	3.54	2.68	2.70	2.45	2.73	1.80	2.03
Manufacture of electrical machinery and apparatus; Count	1	1	1	0	1	2	2	1.27	1.07	1.15	0.00	0.94	1.94	1.67
Manufacture of food, drinks and tobacco products; Count	3	4	5	5	4	4	4	1.09	1.31	1.67	1.63	1.25	1.40	1.21
Manufacture of glass; Count	1	1	1	0	0	0	0	8.86	9.06	9.78	0.00	0.00	0.00	0.00

Manufacture of leather and leather products; Count	1	1	1	1	1	1	1	1	7.38	6.04	7.82	6.64	6.55	7.10	6.27
Manufacture of metals and metal products; Count	1	3	4	4	5	5	5	5	0.98	2.36	3.19	3.25	3.39	3.38	2.94
Manufacture of other non-metal goods; Count	1	2	1	1	1	1	1	1	0.79	1.19	0.67	0.63	0.60	0.71	0.63
Manufacture of rubber and plastics, automotive; Count	1	3	1	2	2	2	2	2	1.64	3.62	1.22	1.70	1.33	1.37	1.16
Manufacture of transport equipment; Count	3	1	3	6	7	7	7	7	2.01	0.50	1.59	2.41	3.99	4.66	3.99
Manufacture of wood and wooden products; Count	0	0	1	0	0	0	1	1	0.00	0.00	4.89	0.00	0.00	0.00	4.70
Transport, storage and communication; Count					1	1	1	1					0.91	0.97	0.90
Total:	19	22	22	24	28	27	29								

Podlaskie

Electricity, gas and water supply; Count	0	1	1	2	1	1	1	1	0.00	7.61	4.70	5.15	4.00	3.61	4.33
Manufacture of fabrics and textiles; Count	1	1	2	2	2	1	1	1	3.96	5.18	8.15	8.51	6.07	3.37	4.04
Manufacture of food, drinks and tobacco products; Count	2	2	2	2	3	4	3	3	1.82	2.33	2.09	1.81	2.38	3.43	2.93
Manufacture of metals and metal products; Count	1	1	1	1	1	1	1	1	2.46	2.81	2.49	2.26	1.73	1.66	1.89
Manufacture of pulp and paper; Count	2	0	0	0	0	0	0	0	8.86	0.00	0.00	0.00	0.00	0.00	0.00
Manufacture of rubber and plastics; Count	0	0	0	1	1	1	1	1	0.00	0.00	0.00	2.35	1.70	1.69	1.86
Manufacture of wood and wooden products; Count	1	1	1	1	1	1	1	1	15.82	16.18	15.28	22.13	12.51	13.07	15.15
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; Count	1	1	1	0	2	2	1	1	3.16	4.18	4.08	0.00	4.66	1.82	1.07
Total:	8	7	8	9	11	11	9								

Pomorskie

Agriculture, hunting and forestry; Count	2	2	2	2	2	1	1	1	11.66	11.92	10.87	11.07	10.79	7.23	5.25
Construction; Count	1	2	2	1	4	4	4	4	0.56	1.19	0.92	0.58	2.01	2.02	2.00
Electricity, gas and water supply; Count	2	3	4	4	4	4	4	4	3.33	4.21	3.34	3.69	3.45	2.99	3.00
Financial intermediation; Count	2	2	4	6	4	3	1	1	2.45	2.38	3.00	1.43	0.95	0.79	0.25

Continued

	Number of Firms										RLAIs Index					
	886	906	978	996	1101	1150	1091	2000	2001	2002	2003	2004	2005	2006		
All Firms Total																
Activities (PKD)	2000	2001	2002	2003	2004	2005	2006	2000	2001	2002	2003	2004	2005	2006		
Hotels and restaurants; Count	1	1	1	1	1	1	1	1.06	1.25	1.09	1.05	0.98	0.94	0.91		
Manufacture of chemicals and chemical products; Count	1	1	2	1	1	1	1	0.47	0.44	0.75	0.34	0.30	0.31	0.28		
Manufacture of electrical machinery and apparatus; Count	1	2	2	2	2	4	5	0.67	1.40	1.28	1.30	1.03	1.97	2.33		
Manufacture of food, drinks and tobacco products; Count	10	10	10	10	12	12	11	1.91	2.15	1.86	1.81	1.71	2.13	1.86		
Manufacture of furniture and consumer goods; Count	2	2	2	3	2	3	3	2.74	2.65	2.56	3.91	2.70	2.60	2.42		
Manufacture of metals and metal products; Count	1	1	1	2	2	3	3	0.52	0.52	0.44	0.90	0.74	1.03	0.98		
Manufacture of other non-metal goods; Count	2	2	2	1	3	2	3	0.83	0.78	0.75	0.35	0.98	0.72	1.05		
Manufacture of pulp and paper, publishing and printing; Count	1	1	2	1	1	0	1	0.93	0.99	1.74	1.05	0.74	0.00	0.42		
Manufacture of rubber and plastics; Count	2	1	1	3	4	4	4	1.73	0.79	0.68	1.41	1.46	1.40	1.29		
Manufacture of transport equipment; Count	5	4	3	2	5	5	5	1.77	1.31	0.88	0.45	1.56	1.70	1.59		
Other community, social and personal service activities; Count	1	1	2	2	2	1	1	11.66	7.95	14.49	2.77	3.32	2.71	0.91		
Real estate, rental and business activities; Count	2	2	2	1	1	2	2	2.59	2.65	2.07	1.01	0.86	0.74	0.75		
Transport, storage and communication; Count					3	3	2					1.51	1.48	1.00		
Total:	36	37	42	42	51	53	52									
	Slaskie															
Construction; Count	2	1	2	3	2	4	3	0.70	0.40	0.71	1.06	0.63	1.24	0.88		
Electricity, gas and water supply; Count	2	1	3	4	4	4	4	2.11	0.95	1.91	1.99	1.87	1.84	1.75		
Financial intermediation; Count	1	1	2	3	3	4	5	0.78	0.81	1.14	0.43	0.45	0.65	0.72		
Hotels and restaurants; Count	1	1	1	1	1	1	1	0.67	0.85	0.83	0.64	0.62	0.58	0.53		
Manufacture of chemicals and chemical products; Count	1	2	1	2	4	4	5	0.30	0.60	0.29	0.41	0.76	0.75	0.83		

Manufacture of electrical machinery and apparatus; Count	5	5	5	6	8	6	6	2.11	2.38	2.44	2.38	2.59	1.82	1.63
Manufacture of fabricated metal products, except machinery and equipment; Count	1	0	1	0	0	0	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manufacture of fabrics and textiles; Count	0	0	1	2	2	2	2	0.00	0.00	0.55	1.04	0.82	0.86	0.82
Manufacture of food, drinks and tobacco products; Count	3	3	3	3	2	3	4	0.36	0.44	0.43	0.33	0.22	0.33	0.40
Manufacture of furniture and consumer goods; Count	2	1	0	1	0	1	1	1.74	0.90	0.00	0.79	0.00	0.53	0.47
Manufacture of machinery and equipment; Count	1	1	1	3	6	5	5	0.55	0.60	0.59	1.09	1.85	1.59	1.46
Manufacture of metals and metal products; Count	10	9	7	9	9	13	13	3.28	3.17	2.37	2.47	2.11	2.76	2.49
Manufacture of other non-metal goods; Count	6	4	6	6	9	8	7	1.58	1.06	1.71	1.28	1.85	1.78	1.43
Manufacture of pulp and paper, publishing and printing; Count	3	2	2	2	2	2	2	1.77	1.35	1.33	1.28	0.94	0.52	0.49
Manufacture of rubber and plastics; Count	5	6	7	9	10	11	12	2.73	3.24	3.63	2.58	2.30	2.37	2.26
Manufacture of transport equipment; Count	12	11	12	14	14	11	11	2.68	2.44	2.69	1.90	2.76	2.30	2.17
Mining and quarrying; Count	0	2	0	0	1	1	1	0.00	10.79	0.00	0.00	2.72	2.67	2.45
Municipal services Count	3	2	2	1	1	1	1	11.08	8.09	4.74	2.69	2.72	0.00	0.00
Other community, social and personal service activities; Count	1	2	1	3	1	2	2	7.38	10.79	5.53	2.52	1.05	1.49	1.07
Real estate, rental and business activities; Count	0	0	0	0	0	1	1	0.00	0.00	0.00	0.00	0.00	0.23	0.22
Transport, storage and communication; Count					1	1	1				0.32	0.30	0.29	
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; Count	0	1	1	1	1	2	2	0.00	0.52	0.55	0.31	0.32	0.23	0.22
Total:	59	55	58	73	81	86	89							

Continued

	Number of Firms										RLAis Index					
	886	906	978	996	1101	1150	1091	2000	2001	2002	2003	2004	2005	2006		
All Firms Total	886	906	978	996	1101	1150	1091									
Activities (PKD)	2000	2001	2002	2003	2004	2005	2006	2000	2001	2002	2003	2004	2005	2006		
	Świętokrzyskie															
Chemicals and chemical products Count	1	0	0	0	0	0	0	1.36	0.00	0.00	0.00	0.00	0.00	0.00		
Construction; Count	0	1	1	1	1	1	1	0.00	1.74	1.73	2.18	1.71	2.06	2.00		
Electricity, gas and water supply; Count	3	2	1	0	2	2	2	14.60	8.20	3.13	0.00	5.06	6.10	5.99		
Manufacture of fabrics and textiles; Count	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	2.22	2.85	2.80		
Manufacture of food, drinks and tobacco products Count	1	1	1	1	1	0	0	0.56	0.63	0.70	0.68	0.58	0.00	0.00		
Manufacture of machinery and equipment; Count	2	2	2	3	3	2	2	5.05	5.16	5.82	6.73	5.00	4.21	4.00		
Manufacture of metals and metal products; Count	0	0	3	2	2	2	2	0.00	0.00	4.99	3.39	2.53	2.81	2.62		
Manufacture of other non-metal goods; Count	3	3	3	3	3	3	3	3.65	3.43	4.22	3.95	3.34	4.42	4.20		
Manufacture of pulp and paper, publishing and printing; Count	1	1	0	1	1	1	1	2.73	2.90	0.00	3.95	2.53	1.73	1.68		
Manufacture of transport equipment; Count	2	2	0	0	1	1	1	2.07	1.91	0.00	0.00	1.06	1.38	1.35		
Wholesale and retail trade, transport equipment Count	0	1	1	1	0	0	0	0.00	2.25	2.72	1.93	0.00	0.00	0.00		
Total:	13	13	12	12	15	13	13									
	Warmińsko-Mazurskie															
Agriculture, hunting and forestry; Count	1	0	0	2	2	2	2	20.14	0.00	0.00	41.50	42.35	58.97	41.96		
Electricity, gas and water supply; Count	1	1	1	1	1	1	1	5.75	5.33	3.76	3.07	2.92	3.05	3.00		
Manufacture of fabrics and textiles; Count	1	1	1	1	1	1	1	2.88	3.62	3.26	3.19	2.57	2.85	2.80		
Manufacture of food, drinks and tobacco products; Count	3	2	2	2	2	1	1	1.98	1.63	1.67	1.36	1.34	0.73	0.68		
Manufacture of furniture and consumer goods; Count	1	2	1	1	1	1	1	4.74	10.07	5.75	4.88	5.29	3.54	3.23		

	Number of Firms										RLAis Index					
	886	906	978	996	1101	1150	1091	2000	2001	2002	2003	2004	2005	2006		
All Firms Total	886	906	978	996	1101	1150	1091									
Activities (PKD)	2000	2001	2002	2003	2004	2005	2006	2000	2001	2002	2003	2004	2005	2006		
Manufacture of other non-metal goods; Count	2	2	4	4	4	2	3	0.34	0.32	0.70	0.67	0.61	0.36	0.51		
Manufacture of pharmaceuticals Count	0	1	2	0	0	0	0	0.00	?	2.24	0.00	0.00	0.00	0.00		
Manufacture of pulp and paper, publishing and printing; Count	1	0	2	2	2	3	1	0.39	0.00	0.81	1.01	0.70	0.63	0.20		
Manufacture of rubber and plastics; Count	5	5	6	7	10	10	10	1.78	1.64	1.89	1.58	1.71	1.73	1.57		
Manufacture of transport equipment; Count	4	4	1	2	3	5	5	0.58	0.54	10.08	0.21	0.44	0.84	0.77		
Manufacture of wood and wooden products; Count	1	1	1	0	2	2	2	1.38	1.23	1.26	0.00	2.53	2.69	2.55		
Other community, social and personal service activities; Count	1	2	2	1	1	1	1	4.82	6.57	20.16	0.66	3.37	0.47	0.44		
Real estate, rental and business activities; Count	1	0	1	1	3	3	3	0.54	0.00	0.48	0.48	1.21	0.55	0.55		
Telecommunications Count	2	2	2	0	0	0	0	1.28	1.52	1.34	0.00	0.00	0.00	0.00		
Trade and repairs Count	2	3	5	4	4	0	0	0.88	0.84	1.17	0.96	0.88	0.00	0.00		
Transport, storage and communication; real estate, rental and business activities; Count					6	5	5					1.27	1.22	1.21		
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; Count	7	7	11	13	17	13	13	1.93	2.22	3.70	3.20	3.99	1.21	1.19		
Total:	88	90	93	89	109	107	107									

Zachodnio-Pomorskie

Computer and related activities Count	0	0	0	3	0	0	1	0.00	0.00	0.00	129.91	0.00	0.00	35.19
Electricity, gas and water supply; Count	1	1	2	3	2	3	3	3.72	2.80	3.96	5.41	3.67	3.61	3.77
Hotels and restaurants; Count	1	1	1	1	1	1	1	2.37	2.51	2.57	2.06	2.09	1.52	1.53
Manufacture of chemicals and chemical products; Count	1	1	1	1	1	4	2	1.04	0.88	0.89	0.67	0.64	1.96	0.95
Manufacture of consumer products Count	0	0	0	1	1	0	0	0.00	0.00	0.00			0.00	0.00

Manufacture of electrical machinery and apparatus; Count	5	3	3	0	3	2	3	7.45	4.21	4.54	0.00	3.28	1.58	2.35
Manufacture of food, drinks and tobacco products; Count	5	5	6	7	8	10	10	2.14	2.15	2.64	2.48	2.91	2.86	2.84
Manufacture of furniture and consumer goods; Count	0	2	2	2	2	3	3	0.00	5.30	6.06	5.09	5.73	4.18	4.06
Manufacture of leather and leather products; Count	0	0	0	0	0	1	1	0.00	0.00	0.00	0.00	0.00	5.81	5.87
Manufacture of machinery and equipment Count	1	1	1	1	1	0	0	1.93	1.77	1.84	1.17	1.04	0.00	0.00
Manufacture of metals and metal products; Count	0	0	0	0	1	2	2	0.00	0.00	0.00	0.00	0.79	1.11	1.10
Manufacture of other non-metal goods; Count	0	0	0	1	1	1	1	0.00	0.00	0.00	0.69	0.70	0.58	0.59
Manufacture of pulp and paper, publishing and printing; Count	1	2	1	1	1	1	0	2.08	3.97	2.06	2.06	1.58	0.68	0.00
Manufacture of rubber and plastics; Count	0	0	0	0	0	1	1	0.00	0.00	0.00	0.00	0.00	0.56	0.54
Manufacture of wood and wooden products; Count	0	1	1	1	1	1	0	0.00	5.96	6.43	8.66	5.73	4.36	0.00
Real estate, rental and business activities; Count	1	1	0	0	0	1	1	2.90	2.65	0.00	0.00	0.00	0.59	0.63
Transport, storage and communication; Count														
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; Count	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	0.00	0.79	0.84
Total:	16	18	18	22	24	33	31						0.30	0.32

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIIZ) and the author's own analysis.

Appendix 2 Concentration of foreign firms according to country-of-origin – RLACO

Country-of-origin	2000	2001	2002	2003	2004	2005	2006	2000	2001	2002	2003	2004	2005	2006
All firms total:	886	906	978	996	1101	1150	1091	RLA CO						
Dolnośląskie														
Austria	1	1	1	1	1	1	1	0.35	0.33	0.33	0.32	0.27	0.30	0.27
Belgium	2	1	2	2	3	3	3	1.17	0.57	1.12	1.10	1.27	1.44	1.28
Canada	2	3	2	2	2	2	2	1.41	2.90	1.84	1.80	1.76	1.92	1.86
Czech Republic	1	1	0	0	0	0	0	3.36	3.15	0.00	0.00	0.00	0.00	0.00
Denmark	1	1	1	1	2	2	2	0.39	0.33	0.30	0.29	0.24	0.49	0.41
Finland	1	1	2	1	1	0	0	0.67	0.70	1.61	0.66	0.55	0.00	0.00
France	4	5	2	2	2	2	2	0.77	0.72	0.28	0.28	0.22	0.26	0.22
Germany	24	25	30	32	34	33	31	1.54	1.52	1.67	1.82	1.54	1.67	1.41
Ireland	0	0	0	1	1	1	1	0.00	0.00	0.00	4.20	2.29	2.08	1.59
International	1	0	0	0	0	0	0	0.64	0.00	0.00	0.00	0.00	0.00	0.00
Italy	2	2	2	1	3	3	3	0.41	0.41	0.42	0.20	0.50	0.60	0.53
Japan	0	1	0	1	7	7	7	0.00	0.33	0.00	0.57	2.97	3.50	2.69
Luxembourg	1	1	1	2	2	2	2	4.47	2.10	3.22	1.80	1.43	1.56	1.39
Monaco	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	11.47	12.50	11.13
Norway	1	0	0	0	0	0	0	2.68	0.00	0.00	0.00	0.00	0.00	0.00
Portugal	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	2.87	2.50	2.23
Russia	1	1	1	1	1	1	1	6.71	6.29	6.43	6.30	3.82	4.17	3.71
South Korea	0	0	0	0	0	0	5	0.00	0.00	0.00	0.00	0.00	0.00	4.64
Spain	2	2	1	1	1	1	2	3.84	2.80	0.99	1.15	1.04	1.25	1.86
Sweden	1	1	3	3	4	4	4	0.25	0.22	0.68	0.69	0.78	0.86	0.80
Switzerland	1	3	3	3	3	3	3	0.71	1.72	1.61	1.58	1.27	1.29	1.19
The Netherlands	5	5	7	8	7	5	5	1.02	0.85	0.99	1.03	0.76	0.63	0.56
Turkey	1	1	2	2	1	1	1	3.36	3.15	6.43	6.30	2.87	1.25	1.11
United Kingdom	6	6	4	4	7	7	8	2.30	1.89	1.14	1.07	1.51	1.68	1.75

USA	8	11	12	11	13	12	13	0.83	1.11	1.21	1.04	1.12	1.15	1.09
Wojewodztwo total:	66	72	76	79	96	92	98							
Kujawsko-Pomorskie														
Austria	5	3	2	2	3	2	2	5.55	3.97	2.79	2.43	2.91	2.95	2.22
Belgium	1	1	0	1	2	0	1	1.83	2.29	0.00	2.06	3.02	0.00	1.75
Denmark	1	1	1	1	1	1	1	1.24	1.32	1.26	1.08	0.85	1.19	0.84
France	0	0	1	1	1	1	1	0.00	0.00	0.58	0.53	0.40	0.62	0.45
Germany	9	8	8	8	9	8	8	1.82	1.95	1.88	1.71	1.45	1.96	1.49
Hungary	0	0	0	1	1	0	1	0.00	0.00	0.00	11.86	10.19	0.00	7.58
International	1	0	0	1	1	0	0	2.01	0.00	0.00	3.95	3.71	0.00	0.00
Italy	2	2	1	1	1	0	0	1.30	1.65	0.88	0.75	0.59	0.00	0.00
Japan	0	0	0	0	0	1	1	0.00	0.00	0.00	0.00	0.00	2.42	1.57
Norway	0	0	1	1	1	0	0	0.00	0.00	4.18	3.39	2.72	0.00	0.00
South Korea	0	0	0	0	2	0	2	0.00	0.00	0.00	0.00	13.59	0.00	7.58
Sweden	0	1	1	1	1	1	1	0.00	0.88	0.95	0.86	0.69	1.04	0.81
Switzerland	0	0	0	0	0	1	1	0.00	0.00	0.00	0.00	0.00	2.09	1.62
The Netherlands	1	1	2	2	2	3	3	0.64	0.68	1.19	0.97	0.78	1.83	1.38
United Kingdom	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	0.77	1.16	0.89
USA	1	1	1	1	1	0	1	0.32	0.40	0.42	0.36	0.31	0.00	0.34
Wojewodztwo total:	21	18	18	21	27	19	24							

Łódzkie

Australia	1	1	0	0	0	0	0	6.28	8.55	0.00	0.00	0.00	0.00	0.00
Austria	2	2	2	2	5	4	1	0.99	0.90	0.88	0.91	2.02	1.75	0.40
Austria/Belgium	0	0	0	0	1	1	3	0.00	0.00	0.00	0.00	16.94	17.97	49.59
Belgium	0	0	1	1	1	1	1	0.00	0.00	0.75	0.77	0.63	0.69	0.64
Canada	0	0	1	1	1	1	1	0.00	0.00	1.23	1.27	1.30	1.38	1.38
Cyprus	1	0	0	0	0	0	0	9.43	0.00	0.00	0.00	0.00	0.00	0.00

Continued

Country-of-origin	2000	2001	2002	2003	2004	2005	2006	2000	2001	2002	2003	2004	2005	2006
All firms total:	886	906	978	996	1101	1150	1091							
								RLA CO						
Czech Republic	1	1	1	1	2	0	0	4.71	4.27	4.29	4.45	6.78	0.00	0.00
Denmark	2	2	3	3	3	4	5	1.11	0.90	1.20	1.21	1.06	1.41	1.53
Finland	0	0	0	1	1	2	2	0.00	0.00	0.00	0.94	0.81	1.89	1.74
France	6	6	5	5	6	4	5	1.62	1.18	0.92	0.99	1.00	0.73	0.83
Germany	13	14	16	14	19	18	19	1.17	1.16	1.19	1.12	1.27	1.31	1.29
Greece	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	5.65	5.99	5.51
Italy	6	8	9	9	9	8	8	1.74	2.24	2.49	2.54	2.21	2.28	2.10
Lichtenstein	0	1	1	1	1	1	1	0.00	4.27	4.29	4.45	3.39	3.59	2.76
Portugal	1	1	1	1	1	1	1	3.77	4.27	4.29	5.93	4.23	3.59	3.31
South Korea	2	1	0	0	0	0	0	7.54	4.27	0.00	0.00	0.00	0.00	0.00
Sweden	0	1	0	0	0	0	0	0.00	0.30	0.00	0.00	0.00	0.00	0.00
Switzerland	0	1	1	1	1	2	2	0.00	0.78	0.71	0.74	0.63	1.24	1.18
Taiwan	1	1	1	0	0	0	0	18.85	17.09	17.16	0.00	0.00	0.00	0.00
The Netherlands	3	4	5	7	4	5	5	0.86	0.92	0.94	1.27	0.65	0.91	0.83
Turkey	1	1	1	1	1	1	1	4.71	4.27	4.29	4.45	4.23	1.80	1.65
United Kingdom	2	3	4	2	1	2	2	1.08	1.28	1.53	0.76	0.32	0.69	0.65
USA	5	5	5	6	7	8	8	0.73	0.68	0.67	0.80	0.89	1.10	0.99
Wojewodztwo total:	47	53	57	56	65	64	66							

Lubelskie

Belgium	1	2	1	1	0	2	2	2.57	4.84	3.27	3.09	0.00	5.20	5.25
Canada	1	0	0	0	0	1	1	3.11	0.00	0.00	0.00	0.00	5.20	5.68
Cyprus	1	1	1	0	0	0	0	29.53	26.65	25.08	0.00	0.00	0.00	0.00
France	1	1	1	1	1	2	2	0.84	0.61	0.81	0.79	0.67	1.38	1.36
Germany	4	4	3	3	5	4	4	1.13	1.03	0.98	0.96	1.36	1.10	1.12
International	0	0	1	1	1	1	1	0.00	0.00	4.43	5.93	6.26	7.52	7.58

Italy	1	2	0	1	1	1	1	0.91	1.75	0.00	1.13	1.00	1.07	1.08
Japan	0		0	1	1	0	0	0.00	0.00	0.00	3.23	2.55	0.00	0.00
Luxembourg	1	1	0	0	0	0	0	19.69	8.88	0.00	0.00	0.00	0.00	0.00
Mexico	0	0	0	0	0	0	1	0.00	0.00	0.00	0.00	0.00	0.00	68.19
South Korea	0	1	1	1	1	1	1	0.00	13.32	18.81	17.79	11.47	11.27	5.68
Sweden	1	1	1	0	0	0	0	1.11	0.93	1.32	0.00	0.00	0.00	0.00
Switzerland	1	1	1	1	1	1	1	2.81	2.42	3.13	2.96	2.55	2.33	2.44
The Netherlands	1	1	2	1	2	0	0	3.11	3.55	1.65	0.73	1.31	0.00	0.00
United Kingdom	1	1	0	2	2	2	0	1.69	1.33	0.00	142.29	2.60	2.60	0.00
USA	1	1	1	1	1	2	2	0.45	0.43	0.59	0.53	0.52	1.03	1.03
Wojewodztwo total:	15	17	13	14	16	17	16							

Lubuskie

Belgium	1	0	0	0	1	0	0	2.57	0.00	0.00	0.00	1.70	0.00	0.00
Croatia	1	1	1	1	1	0	1	29.53	21.57	25.74	24.90	22.94	0.00	24.80
Denmark	1	1	1	1	1	1	1	1.74	1.14	1.20	1.13	0.96	1.02	0.92
France	0	1	1	1	1	1	1	0.00	0.50	0.55	0.55	0.45	0.53	0.50
Germany	2	6	5	6	8	8	8	0.57	1.25	1.11	1.35	1.45	1.69	1.63
Greece	1	1	1	0	0	0	0	29.53	21.57	12.87	0.00	0.00	0.00	0.00
International	1	1	0	0	0	0	0	2.81	2.40	0.00	0.00	0.00	0.00	0.00
Italy	3	4	4	4	4	4	4	2.73	2.83	3.32	3.16	2.66	3.32	3.15
Norway	0	1	1	1	1	1	1	0.00	2.88	3.96	3.56	3.06	4.02	3.31
South Korea	1	0	0	0	0	0	0	11.81	0.00	0.00	0.00	0.00	0.00	0.00
Sweden	2	1	2	3	3	3	3	2.23	0.76	1.81	2.72	2.33	2.70	2.66
Switzerland	1	2	1	1	1	1	1	3.11	3.92	2.14	2.08	1.70	1.80	1.77
The Netherlands	1	1	1	1	2	2	2	0.89	0.58	0.57	0.51	0.87	1.06	1.00
United Kingdom	0	1	1	1	1	1	0	0.00	1.08	1.14	1.06	0.87	1.01	0.00
Wojewodztwo total:	15	21	19	20	24	22	22							

Continued

Country-of-origin	2000	2001	2002	2003	2004	2005	2006	2000	2001	2002	2003	2004	2005	2006
All firms total:	886	906	978	996	1101	1150	1091	RLA CO						
Małopolskie														
Australia	0	0	0	1	1	1	1	0.00	0.00	0.00	12.45	7.98	14.38	8.87
Austria	3	4	4	0	3	3	2	1.94	2.45	2.33	0.00	1.71	2.10	1.30
Croatia	1	1	1	1	1	1	1	12.31	11.62	11.37	12.45	11.97	14.38	13.30
Denmark	1	1	1	2	2	2	2	0.72	0.61	0.53	1.13	1.00	1.13	0.99
Finland	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	1.14	1.51	1.40
France	4	4	5	4	3	2	3	1.41	1.07	1.22	1.11	0.70	0.59	0.80
Germany	8	6	8	8	9	6	7	0.94	0.67	0.79	0.90	0.85	0.70	0.76
International	1	1	0	0	0	0	0	1.17	1.29	0.00	0.00	0.00	0.00	0.00
Italy	4	4	3	3	2	2	2	1.51	1.52	1.10	1.19	0.69	0.91	0.84
Japan	1	1	1	2	2	2	2	1.17	1.94	1.42	2.26	1.77	2.30	1.84
Lichtenstein	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	4.79	5.75	4.43
Norway	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	1.60	2.21	1.77
Portugal	1	0	0	0	0	0	0	4.92	0.00	0.00	0.00	0.00	0.00	0.00
Switzerland	0	2	2	2	2	2	2	0.00	2.11	1.90	2.08	1.77	1.98	1.90
The Netherlands	3	4	5	6	6	5	5	1.12	1.26	1.25	1.52	1.37	1.45	1.34
Turkey	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	5.98	2.88	2.66
United Kingdom	2	3	3	3	3	3	3	1.41	1.74	1.52	1.59	1.35	1.66	1.57
USA	7	8	10	9	9	8	8	1.33	1.49	1.78	1.68	1.62	1.76	1.60
Wojewodztwo total:	36	39	43	40	46	40	41							
Mazowieckie														
Australia	2	1	2	2	2	1	1	1.86	1.30	2.43	2.43	1.70	1.40	0.89
Austria	17	16	18	20	19	16	20	1.25	1.09	1.12	1.25	1.15	1.09	1.31

Belgium	5	5	7	6	6	5	5	0.61	0.59	0.74	0.63	0.57	0.54	0.52
Canada	8	3	3	3	3	3	3	1.18	0.60	0.52	0.52	0.59	0.65	0.67
China	1	1	1	1	1	1	1	1.40	1.30	1.21	1.21	1.27	1.40	1.34
Croatia	0	0	0	0	0	1	0	0.00	0.00	0.00	0.00	0.00	1.40	0.00
Cyprus	0	0	1	1	2	2	3	0.00	0.00	0.81	1.21	1.70	1.87	2.68
Czech Republic	1	2	3	3	3	2	2	0.70	1.30	1.82	1.82	1.53	1.40	1.34
Denmark	14	17	18	15	19	19	21	1.15	1.16	1.02	0.83	1.01	1.04	1.04
Finland	8	10	8	11	12	9	9	1.12	1.44	1.21	1.41	1.46	1.33	1.27
France	32	44	49	47	53	49	44	1.28	1.31	1.28	1.27	1.32	1.40	1.18
Germany	46	50	67	62	68	67	64	0.62	0.63	0.70	0.68	0.69	0.76	0.70
Germany/Finland	0	0	0	1	1	1	1	0.00	0.00	0.00	2.43	2.55	2.80	2.68
Greece	1	1	3	2	1	1	1	1.40	1.30	1.82	2.43	0.85	0.93	0.89
Hungary	0	0	2	2	2	2	3	0.00	0.00	1.62	1.21	1.27	0.93	1.34
India	0	0	0	0	0	1	1	0.00	0.00	0.00	0.00	0.00	1.40	1.34
International	11	10	8	6	6	6	6	1.46	1.44	1.14	1.21	1.39	1.87	1.79
Ireland	1	1	0	0	2	2	2	0.93	0.87	0.00	0.00	1.02	0.93	0.77
Israel	4	3	3	3	3	3	0	2.24	1.95	1.82	1.82	1.91	2.10	0.00
Italy	23	22	24	24	23	23	21	0.99	0.94	0.94	0.93	0.85	1.02	0.89
Japan	4	3	4	10	9	9	10	1.02	0.65	0.88	1.10	0.85	1.01	0.92
Lichtenstein	1	1	1	1	1	1	2	0.70	0.65	0.61	0.61	0.51	0.56	0.89
Luxembourg	1	4	8	8	10	9	9	0.93	1.73	1.94	1.39	1.59	1.57	1.51
Norway	5	5	4	5	5	3	5	1.00	0.87	0.75	0.87	0.85	0.65	0.89
Norway, Germany	0	0	0	0	0	1	1	0.00	1.30	0.00	0.00	0.00	2.80	2.68
Portugal	1	2	2	1	1	1	1	0.56	1.30	1.21	0.81	0.64	0.56	0.54
South Africa	1	0	0	0	0	0	0	1.40	0.00	0.00	0.00	0.00	0.00	0.00
Russia	1	1	2	2	2	2	2	1.40	1.30	4.85	1.62	1.70	1.87	1.79
Slovenia	1	2	2	2	2	1	2	2.79	2.60	2.43	2.43	2.55	1.40	2.68
South Korea	2	2	3	3	3	3	4	1.12	1.30	1.82	1.82	1.27	1.40	0.89
Spain	3	4	8	7	7	7	7	1.20	1.15	1.49	1.55	1.62	1.96	1.56
Sweden	27	29	28	24	24	20	18	1.42	1.32	1.19	1.06	1.04	0.96	0.86

Continued

Country-of-origin	2000	2001	2002	2003	2004	2005	2006	2000	2001	2002	2003	2004	2005	2006
All firms total:	886	906	978	996	1101	1150	1091	RLA CO						
Sweden/Switzerland	0	0	0	1	1	1	0	0.00	0.00	0.00	2.43	2.55	2.80	0.00
Switzerland	6	7	9	10	10	10	9	0.88	0.83	0.91	1.01	0.94	0.96	0.86
The Netherlands	20	26	33	39	45	39	39	0.85	0.91	0.88	0.97	1.09	1.10	1.06
Turkey	1	1	1	1	1	7	7	0.70	0.65	0.61	0.61	0.64	1.96	1.88
United Kingdom	11	16	21	18	18	19	19	0.88	1.04	1.13	0.93	0.87	1.02	1.00
USA	58	60	60	68	66	63	63	1.25	1.25	1.14	1.24	1.26	1.35	1.27
USA/United Kingdom	0	0	0	1	1	1	1	0.00	0.00	0.00	2.43	1.27	2.80	2.68
Wojewodztwo total:	317	349	403	410	432	411	407							
Opolskie														
Austria	2	1	2	2	2	2	2	2.91	1.49	2.95	2.69	2.62	2.44	2.42
Belgium	3	3	3	3	3	3	3	7.22	7.72	7.50	6.84	6.12	5.77	5.72
Finland	1	1	1	1	1	1	1	2.91	3.15	3.60	2.76	2.62	2.63	2.61
France	0	0	0	1	1	1	1	0.00	0.00	0.00	0.58	0.54	0.51	0.50
Germany	5	5	5	6	7	8	8	1.32	1.37	1.25	1.42	1.52	1.62	1.63
Hungary	0	0	0	0	0	1	1	0.00	0.00	0.00	0.00	0.00	8.33	8.27
Italy	0	0	0	0	0	1	1	0.00	0.00	0.00	0.00	0.00	0.79	0.79
Norway	1	1	1	1	1	1	0	3.96	3.78	4.43	3.74	3.67	3.85	0.00
Switzerland	0	1	1	1	1	1	1	0.00	2.57	2.40	2.18	2.04	1.72	1.77
The Netherlands	1	1	1	1	1	1	1	0.84	0.77	0.63	0.53	0.52	0.51	0.50
United Kingdom	1	1	1	1	1	1	1	1.58	1.42	1.28	1.12	1.04	0.96	0.97
USA	2	2	2	2	2	2	2	2.91	0.91	0.90	0.79	55.05	0.76	0.75
Wojewodztwo total:	16	16	17	19	20	23	22							

Country-of-origin	2000	2001	2002	2003	2004	2005	2006	2000	2001	2002	2003	2004	2005	2006
All firms total:	886	906	978	996	1101	1150	1091	RLA CO						
Pomorskie														
Austria	2	2	1	2	1	2	3	1.06	1.01	0.49	1.06	0.49	1.04	1.51
Belgium	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	0.76	0.82	0.79
Canada	2	2	3	3	3	2	1	2.12	2.97	4.11	4.45	4.71	3.28	1.72
China	1	1	1	1	1	1	1	10.07	9.64	9.59	10.38	10.19	10.65	10.29
Denmark	3	2	2	2	2	2	2	1.78	1.01	0.89	0.94	0.85	0.84	0.76
Finland	1	0	0	1	1	1	1	1.01	0.00	0.00	1.09	0.97	1.12	1.08
France	2	3	3	4	4	4	5	0.58	0.66	0.62	0.92	0.80	0.87	1.03
Germany	11	13	16	15	17	17	15	1.06	1.21	1.33	1.40	1.37	1.47	1.27
International	2	3	2	1	1	1	1	1.92	3.21	2.26	1.73	1.85	2.37	2.29
Ireland	1	0	0	0	0	0	0	6.71	0.00	0.00	0.00	0.00	0.00	0.00
Italy	1	2	2	2	3	2	2	0.31	0.63	0.62	0.66	0.89	0.68	0.65
Norway	2	3	2	1	2	2	2	2.88	3.86	2.95	1.48	2.72	3.28	2.74
Philippines	0	0	0	1	1	1	1	0.00	0.00	0.00	20.75	20.39	21.30	20.58
Sweden	2	3	3	3	4	3	3	0.76	1.01	1.01	1.13	1.38	1.10	1.10
Switzerland	3	1	1	0	0	2	2	3.18	0.88	0.80	0.00	0.00	1.47	1.47
The Netherlands	3	3	4	4	4	3	4	0.92	0.78	0.84	0.85	0.78	0.65	0.83
United Kingdom	0	1	1	1	2	2	2	0.00	0.48	0.43	0.44	0.77	0.82	0.81
USA	8	8	10	7	7	8	7	1.24	1.23	1.50	1.09	1.07	1.30	1.08
Wojewodztwo total:	44	47	51	48	54	54	53							
Śląskie														
Austria	2	2	2	2	2	2	2	0.73	0.77	0.76	0.67	0.61	0.65	0.60
Belgium	2	3	2	3	2	2	1	1.20	1.99	1.29	1.71	0.95	1.03	0.47
Czech Republic	0	0	0	0	0	2	2	0.00	0.00	0.00	0.00	0.00	6.69	6.13

Denmark	2	2	2	2	2	2	2	2	0.81	0.77	0.69	0.60	0.53	0.52	0.45
Finland	3	2	1	1	2	3	3	3	2.08	1.62	0.93	0.69	1.22	2.11	1.94
France	4	4	5	5	6	8	7	7	0.79	0.67	0.80	0.73	0.75	1.09	0.86
Germany	17	15	17	16	19	17	18	18	1.13	1.06	1.09	0.94	0.96	0.92	0.90
Hungary	0	0	0	0	0	1	0	0	0.00	0.00	0.00	0.00	0.00	2.23	0.00
India	0	0	0	0	1	1	1	1	0.00	0.00	0.00	0.00	12.80	6.69	6.13
International	2	2	2	1	1	1	1	1	1.32	1.62	1.74	1.09	1.16	1.49	1.36
Ireland	0	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	0.00	2.23	1.75
Italy	12	12	12	13	18	14	15	15	2.56	2.87	2.87	2.70	3.34	2.97	2.92
Italy/USA	0	0	0	1	1	1	1	1	0.00	0.00	0.00	13.11	12.80	13.37	12.26
Japan	1	2	1	2	2	2	3	3	1.26	2.44	1.35	1.19	0.95	1.07	1.27
Luxembourg	0	0	1	4	4	4	4	4	0.00	0.00	1.48	3.74	3.20	3.34	3.06
Norway	1	1	1	1	1	1	1	1	0.99	0.97	1.14	0.94	0.85	1.03	0.82
Portugal	0	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	0.00	2.67	4.09
South Africa	1	1	1	1	0	0	0	0	6.92	7.31	14.82	0.00	0.00	0.00	0.00
Spain	1	2	3	2	2	2	2	2	1.98	3.25	3.42	2.38	2.33	2.67	2.04
Sweden	4	4	3	3	3	3	4	4	1.04	1.03	0.78	0.71	0.65	0.69	0.88
Switzerland	0	0	0	0	1	1	1	1	0.00	0.00	0.00	0.00	0.47	0.46	0.44
The Netherlands	4	4	6	5	5	7	8	8	0.84	0.79	0.98	0.67	0.61	0.95	0.99
Ukraine	0	0	0	0	0	1	1	1	0.00	0.00	0.00	0.00	0.00	13.37	12.26
United Kingdom	2	1	1	5	6	4	4	4	0.79	0.37	0.33	1.39	1.45	1.03	0.96
USA	6	5	6	10	8	5	6	6	0.64	0.58	0.69	0.99	0.77	0.51	0.55
Wojewodztwo total:	64	62	66	76	86	86	86	89							

Świętokrzyskie

Austria	1	1	1	1	1	1	1	1	1.55	1.70	2.09	2.13	1.75	2.16	2.05
Belgium	4	4	3	2	3	2	2	2	10.27	11.77	10.63	7.22	8.16	6.80	6.46
France	0	1	1	1	2	2	2	2	0.00	0.74	0.88	0.92	1.44	1.81	1.68
Germany	2	2	1	1	1	1	1	1	0.57	0.63	0.35	0.37	0.29	0.36	0.34
Italy	2	2	2	2	2	2	2	2	1.82	2.12	2.63	2.63	2.13	2.81	2.66
Japan	1	1	1	2	2	1	1	1	5.37	5.39	7.41	7.55	5.44	3.54	2.89

Continued

Country-of-origin	2000	2001	2002	2003	2004	2005	2006	2000	2001	2002	2003	2004	2005	2006
All firms total:	886	906	978	996	1101	1150	1091	RIA CO						
The Netherlands	2	2	1	2	2	2	2	1.79	1.75	0.90	1.69	1.40	1.79	1.70
United Kingdom	2	1	2	1	1	1	1	3.38	1.62	3.62	1.77	1.38	1.70	1.65
USA	1	0	0	0	1	1	1	0.45	0.00	0.00	0.00	0.55	0.68	0.63
Wojewodztwo total:	15	14	12	12	15	13	13							
Warmińsko-Mazurskie														
Austria	0	1	0	0	0	0	0	0.00	2.38	0.00	0.00	0.00	0.00	0.00
Belgium	1	1	1	1	1	1	1	3.50	4.12	4.25	3.61	3.14	3.40	3.23
Denmark	1	1	1	1	1	1	1	2.37	2.38	2.27	1.89	1.76	1.73	1.55
Finland	2	1	1	1	1	1	1	8.05	5.03	6.11	4.37	4.03	4.66	4.42
France	1	0	0	1	0	1	2	1.15	0.00	0.00	0.92	0.00	0.90	1.68
Germany	3	3	3	3	5	5	5	1.16	1.31	1.27	1.12	1.67	1.79	1.72
Ireland	0	1	1	1	1	1	1	0.00	30.20	48.90	27.67	16.94	14.74	11.99
Italy	1	0	0	1	1	1	1	1.24	0.00	0.00	1.32	1.23	1.40	1.33
Spain	1	1	1	1	1	0	0	11.51	10.07	7.52	7.55	7.70	0.00	0.00
The Netherlands	0	0	1	1	2	2	1	0.00	0.00	1.07	0.85	1.61	1.79	0.85
United Kingdom	1	0	0	0	0	0	0	2.30	0.00	0.00	0.00	0.00	0.00	0.00
USA	0	1	1	1	0	0	0	0.00	0.72	0.76	0.62	0.00	0.00	0.00
Wojewodztwo total:	11	10	10	12	13	13	13							
Wielkopolskie														
Austria	1	1	2	2	2	2	2	0.39	0.24	0.48	0.51	0.48	0.51	0.50
Belgium	1	1	3	3	3	5	5	0.47	0.41	1.21	1.29	1.12	2.03	1.96
Canada	3	3	3	3	3	3	3	1.41	2.09	2.00	2.11	2.33	2.43	2.55

Denmark	4	5	5	6	5	5	5	1.05	1.19	1.08	1.34	1.05	1.03	0.94
Finland	1	2	2	1	1	1	1	0.45	1.01	1.16	0.52	0.48	0.56	0.54
France	6	11	10	8	9	8	8	0.77	1.15	1.00	0.88	0.89	0.86	0.82
Germany	37	34	33	29	32	33	31	1.58	1.49	1.33	1.29	1.28	1.41	1.30
Hungary	0	0	1	1	1	1	1	0.00	0.00	3.10	2.47	2.53	1.76	1.70
Ireland	1	1	1	1	1	1	1	2.98	3.02	4.66	3.29	2.02	1.76	1.46
Italy	2	1	1	1	1	1	1	0.28	0.15	0.15	0.16	0.15	0.17	0.16
Japan	3	4	3	3	3	3	3	2.44	3.02	2.54	1.34	1.12	1.27	1.05
Lichtenstein	2	2	2	2	2	2	2	4.47	4.53	4.66	4.93	4.04	4.22	3.40
Luxembourg	0	0	0	0	0	1	1	0.00	0.00	0.00	0.00	0.00	0.66	0.64
Malta	1	0	0	0	0	0	0	8.95	0.00	0.00	0.00	0.00	0.00	0.00
Norway	2	1	1	1	2	1	2	1.28	0.60	0.72	0.70	1.35	0.81	1.36
Portugal	1	1	1	1	1	0	0	1.79	2.27	2.33	3.29	2.53	0.00	0.00
South Africa	0	0	0	0	0	0	1	0.00	0.00	0.00	0.00	0.00	0.00	10.20
Sweden	7	9	10	12	12	11	10	1.18	1.43	1.63	2.15	2.05	2.00	1.82
Switzerland	5	4	4	4	5	3	3	2.36	1.65	1.55	1.64	1.87	1.09	1.09
The Netherlands	12	12	13	13	15	17	16	1.63	1.47	1.33	1.31	1.44	1.81	1.65
United Kingdom	3	2	3	3	3	4	4	0.77	0.45	0.62	0.63	0.57	0.81	0.80
USA	7	6	7	7	8	7	7	0.48	0.43	0.51	0.52	0.61	0.56	0.54
Wojewodztwo total:	99	100	105	101	109	109	107							

Zachodnio-Pomorskie

Austria	1	1	1	1	1	2	1	1.37	1.32	1.32	1.16	1.09	1.70	0.86
Belgium	0	0	0	0	0	1	1	0.00	0.00	0.00	0.00	0.00	1.34	1.35
Cyprus	0	1	1	1	1	0	0	0.00	25.17	17.16	22.64	15.29	0.00	0.00
Denmark	2	3	5	7	7	8	9	3.07	3.97	5.99	7.20	6.69	5.47	5.87
Germany	4	3	4	3	4	5	5	1.00	0.73	0.89	0.61	0.73	0.71	0.72
International	1	0	0	1	0	0	0	2.48	0.00	0.00	3.77	0.00	0.00	0.00

Continued

Appendix 2 Continued

Country-of-origin	2000	2001	2002	2003	2004	2005	2006	2000	2001	2002	2003	2004	2005	2006
All firms total:	886	906	978	996	1101	1150	1091	R.L.A CO						
Italy	1	0	0	0	0	1	1	0.80	0.00	0.00	0.00	0.00	0.55	0.56
Norway	2	2	1	1	0	2	2	7.45	6.71	3.96	3.23	0.00	5.36	4.69
South Korea	0	0	0	0	0	2	0	0.00	0.00	0.00	0.00	0.00	11.62	0.00
Sweden	2	2	2	4	7	7	7	1.97	1.77	1.81	3.29	5.44	4.21	4.40
Switzerland	1	1	1	1	1	1	0	2.74	2.29	2.14	1.89	1.70	1.20	0.00
The Netherlands	3	5	4	3	3	3	3	2.37	3.40	2.26	1.39	1.31	1.06	1.07
USA	0	0	0	0	0	1	2	0.00	0.00	0.00	0.00	0.00	0.27	0.53
Wojewodztwo total:	17	18	19	22	24	33	31							

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIZ) and the author's own analysis.

Appendix 3 Multiple regression coefficients for years 2000–2006

	Correlations													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 PKD Average	1													
2 2000 R&D – Private	-0.14	1												
3 2000 R&D – Total	-0.13	0.99	1											
4 2000 Unemployment-secondary	-0.17	0.74	0.7	1										
5 2000 Unemployment-tertiary	-0.18	0.074	0.71	0.94	1									
6 2000 Population	-0.19	0.79	0.75	0.93	0.88	1								
7 2001 R&D – Private	-0.14	1	0.98	0.76	0.76	0.81	1							
8 2001 R&D – Total	-0.14	0.99	1	0.71	0.71	0.76	0.98	1						
9 2001 Unemployment-secondary	-0.17	0.76	0.72	1	0.93	0.96	0.78	0.73	1					
10 2001 Unemployment-tertiary	-0.18	0.78	0.75	0.95	1	0.9	0.8	0.75	0.95	1				
11 2001 Population	-0.19	0.79	0.75	0.93	0.88	1	0.81	0.76	0.96	0.9	1			
12 2002 R&D private	-0.15	0.87	0.87	0.77	0.76	0.82	0.87	0.87	0.79	0.78	0.82	1		
13 2002 R&D-Total	-0.13	0.98	1	0.7	0.71	0.75	0.97	1	0.72	0.74	0.75	0.88	1	
14 2002 Unemployment-secondary	-0.18	0.79	0.75	0.99	0.92	0.96	0.81	0.76	1	0.94	0.96	0.8	0.74	1
15 2002 Unemployment-tertiary	-0.19	0.81	0.78	0.95	0.98	0.91	0.83	0.78	0.95	1	0.91	0.79	0.77	0.95
16 2002 Population	-0.19	0.79	0.75	0.93	0.88	1	0.81	0.76	0.96	0.9	1	0.82	0.75	0.96
17 2002 Wage	-0.13	0.96	0.94	0.69	0.69	0.78	0.96	0.94	0.72	0.74	0.78	0.83	0.93	0.76
18 2003 R&D – Private	-0.15	0.98	0.98	0.76	0.75	0.82	0.97	0.98	0.78	0.78	0.82	0.94	0.98	0.8
19 2003 R&D – Total	-0.14	0.99	1	0.71	0.71	0.76	0.98	1	0.73	0.75	0.77	0.88	1	0.75
20 2003 Unemployment-secondary	-0.18	0.79	0.75	0.99	0.91	0.96	0.81	0.76	1	0.94	0.96	0.8	0.74	1
21 2003 Unemployment-tertiary	-0.19	0.82	0.78	0.96	0.98	0.93	0.84	0.79	0.96	0.99	0.93	0.8	0.78	0.96
22 2003 Population	-0.19	0.79	0.76	0.93	0.87	1	0.81	0.76	0.95	0.9	1	0.82	0.76	0.96
23 2003 Wage	-0.13	0.96	0.94	0.69	0.68	0.79	0.96	0.94	0.72	0.74	0.79	0.83	0.93	0.76
24 2004 R&D – Private	-0.15	0.99	0.99	0.73	0.72	0.787	0.98	0.99	0.75	0.76	0.78	0.91	0.99	0.77

Continued

Correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
25 2004 R&D – Total	-0.13	0.98	1	0.7	0.71	0.76	0.97	1	0.72	0.74	0.76	0.89	1	0.75
26 2004 Unemployment-secondary	-0.18	0.79	0.76	0.99	0.92	0.97	0.81	0.76	0.99	0.94	0.97	0.8	0.75	1
27 2004 Unemployment-tertiary	-0.19	0.81	0.77	0.95	0.98	0.93	0.83	0.78	0.95	0.99	0.92	0.78	0.77	0.96
28 2004 Population	-0.19	0.79	0.76	0.93	0.87	1	0.81	0.77	0.95	0.9	1	0.83	0.76	0.96
29 2004 Wage	-0.14	0.95	0.93	0.7	0.7	0.79	0.96	0.93	0.73	0.75	0.79	0.84	0.92	0.77
30 2005 R&D – Private	-0.15	0.98	0.98	0.74	0.73	0.79	0.97	0.98	0.76	0.76	0.79	0.94	0.98	0.78
31 2005 R&D – Total	-0.14	0.98	0.99	0.71	0.71	0.77	0.97	1	0.73	0.75	0.77	0.9	1	0.75
32 2005 Unemployment-secondary	-0.18	0.81	0.78	0.98	0.92	0.96	0.83	0.79	0.99	0.95	0.96	0.82	0.78	1
33 2005 Unemployment-tertiary	-0.19	0.79	0.76	0.93	0.87	1	0.81	0.77	0.95	0.99	0.91	0.8	0.8	0.95
34 2005 Population	-0.19	0.79	0.76	0.93	0.87	1	0.81	0.77	0.95	0.9	1	0.83	0.76	0.96
35 2005 Wage	-0.15	0.94	0.91	0.69	0.69	0.78	0.94	0.91	0.72	0.74	0.78	0.84	0.91	0.76
36 2006 Unemployment-secondary	-0.17	0.84	0.81	0.98	0.93	0.95	0.85	0.81	0.98	0.95	0.95	0.84	0.8	0.99
37 2006 Unemployment-tertiary	-0.18	0.84	0.8	0.94	0.98	0.91	0.85	0.81	0.94	0.99	0.9	0.8	0.8	0.94
38 2006 Population	-0.19	0.8	0.76	0.93	0.87	1	0.81	0.77	0.95	0.9	1	0.83	0.76	0.96
39 2006 Wage	-0.14	0.93	0.91	0.7	0.69	0.79	0.94	0.91	0.73	0.74	0.79	0.84	0.9	0.77

N=213

For all the results correlation is significant at the P<.05 level

Correlations

	15	16	17	18	19	20	21	22	23	24	25	26	27
1 PKD Average													
2 2000 R&D – Private													
3 2000 R&D – Total													
4 2000 Unemployment-secondary													
5 2000 Unemployment-tertiary													
6 2000 Population													
7 2001 R&D – Private													
8 2001 R&D – Total													
9 2001 Unemployment-secondary													
10 2001 Unemployment-tertiary													
11 2001 Population													
12 2002 R&D – Private													
13 2002 R&D – Total													
14 2002 Unemployment-secondary													
15 2002 Unemployment-tertiary													
16 2002 Population	0.91	1											
17 2002 Wage	0.78	0.78	1										
18 2003 R&D – Private	0.8	0.82	0.92	1									
19 2003 R&D – Total	0.78	0.77	0.93	0.98	1								
20 2003 Unemployment-secondary	0.95	0.96	0.76	0.8	0.75	1							
21 2003 Unemployment-tertiary	1	0.93	0.79	0.81	0.78	0.96	1						
22 2003 Population	0.91	1	0.79	0.82	0.77	0.96	0.92	1					
23 2003 Wage	0.78	0.79	1	0.92	0.93	0.76	0.79	0.79	1				
24 2004 R&D – Private	0.78	0.78	0.93	0.99	0.99	0.77	0.79	0.78	0.93	1			

Continued

Correlations

	15	16	17	18	19	20	21	22	23	24	25	26	27
25 2004 R&D – Total	0.77	0.76	0.93	0.98	1	0.93	0.78	0.76	0.93	0.99	1		
26 2004 Unemployment-secondary	0.95	0.97	0.77	0.8	0.76	0.99	0.96	0.97	0.77	0.78	0.75	1	
27 2004 Unemployment-tertiary	1	0.92	0.78	0.8	0.77	0.95	1	0.92	0.78	0.78	0.77	0.96	1
28 2004 Population	0.91	1	0.79	0.82	0.77	0.96	0.92	1	0.79	0.79	0.77	0.97	0.92
29 2004 Wage	0.79	0.8	1	0.91	0.92	0.77	0.8	0.8	1	0.92	0.92	0.78	0.79
30 2005 R&D – Private	0.79	0.8	0.94	0.99	0.99	0.78	0.8	0.8	0.93	0.99	0.99	0.79	0.78
31 2005 R&D – Total	0.77	0.77	0.93	0.98	1	0.76	0.78	0.77	0.92	0.99	1	0.76	0.77
32 2005 Unemployment-secondary	0.99	0.91	0.78	0.83	0.79	1	0.96	0.96	0.78	0.81	0.78	1	0.96
33 2005 Unemployment-tertiary	0.91	1	0.79	0.83	0.77	0.96	0.92	1	0.79	0.79	0.77	0.97	0.92
34 2005 Population	0.78	0.78	0.99	0.9	0.9	0.77	0.79	0.79	0.99	0.91	0.9	0.77	0.78
35 2005 Wage	0.96	0.95	0.8	0.85	0.81	0.99	0.97	0.95	0.8	0.83	0.81	0.99	0.96
36 2006 Unemployment-secondary	0.99	0.9	0.78	0.83	0.8	0.93	0.99	0.9	0.78	0.81	0.8	0.94	0.99
37 2006 Unemployment-tertiary	0.91	1	0.79	0.83	0.78	0.96	0.92	1	0.79	0.79	0.77	0.97	0.92
38 2006 Population	0.91	1	0.79	0.83	0.78	0.96	0.92	1	0.79	0.79	0.77	0.97	0.92
39 2006 Wage	0.78	0.79	0.99	0.9	0.9	0.77	0.8	0.8	0.99	0.91	0.9	0.78	0.78

N=213

For all the results correlation is significant at the P<.05 level

Correlations

	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Continued

		Correlations															
		28	29	30	31	32	33	34	35	36	37	38	39	40	41		
25	2004 R&D – Total																
26	2004 Unemployment-secondary																
27	2004 Unemployment-tertiary																
28	2004 Population	1															
29	2004 Wage	0.8	1														
30	2005 R&D – Private	0.8	0.93	1													
31	2005 R&D – Total	0.78	0.92	0.99	1												
32	2005 Unemployment-secondary	0.96	0.79	0.81	0.79	1											
33	2005 Unemployment-tertiary	0.91	0.79	0.81	0.8	0.96	1										
34	2005 Population	1	0.8	0.8	0.78	0.96	0.91	1									
35	2005 Wage	0.79	1	0.92	0.9	0.78	0.78	0.79	1								
36	2006 Unemployment-secondary	0.95	0.8	0.83	0.81	1	0.97	0.95	0.79	1							
37	2006 Unemployment-tertiary	0.9	0.78	0.81	0.8	0.95	1	0.9	0.77	0.96	1						
38	2006 Population	1	0.8	0.81	0.78	0.96	0.91	1	0.79	0.96	0.9	1					
39	2006 Wage	0.8	1	0.92	0.9	0.79	0.78	0.8	1	0.79	0.77	0.8	1				
		N=213															
		For all the results correlation is significant at the P<.05 level															

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIIIZ) and the author's own analysis.

Appendix 3a Results of regression – RLAs and amount of total regional investment in select industries (H3a) control

Investment per Industry & Total Investment (2000-2006)	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPAKIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE
Agriculture, hunting and forestry																
Multiple R			0.360								0.963			0.856	0.848	
R Square			0.129								0.928			0.733	0.719	
Adjusted R Square			-0.306								0.892			0.599	0.578	
Mining and quarrying																
Multiple R	0.986				0.734	0.787	0.910					0.571				
R Square	0.973				0.539	0.620	0.828					0.326				
Adjusted R Square	0.959				0.308	0.429	0.742					-0.012				
Manufacturing: Chemicals & Chemical Products																
Multiple R	0.654	0.334	0.419	0.351	0.677	0.604	0.277	0.077	0.835		0.506	0.452	0.444		0.853	0.117
R Square	0.428	0.112	0.176	0.123	0.459	0.364	0.077	0.006	0.697		0.257	0.204	0.197		0.728	0.014
Adjusted R Square	0.142	-0.332	-0.236	-0.315	0.188	0.046	-0.385	-0.491	0.545		-0.115	-0.194	-0.204		0.592	-0.479
Manufacturing: Consumer Products																
Multiple R	0.790		0.366				0.668								0.636	1.000
R Square	0.625		0.134				0.446								0.405	1.000
Adjusted R Square	0.437		-0.300				0.169								0.107	1.000

Continued

Manufacturing: Leather & Leather Products															
Multiple R	0.781	0.887	0.473	0.958	0.333	0.646									
R Square	0.611	0.787	0.224	0.918	0.111	0.417									
Adjusted R Square	0.416	0.680	-0.164	0.877	-0.334	0.125									
Manufacturing: Machinery & Equipment															
Multiple R	0.747	0.662	0.630	0.887	0.715	0.508	0.782	0.781	0.898						
R Square	0.559	0.439	0.397	0.787	0.512	0.258	0.612	0.610	0.806						
Adjusted R Square	0.338	0.158	0.096	0.680	0.268	-0.113	0.418	0.415	0.709	0.226					
Manufacturing: Metals & Metal Products															
Multiple R	0.868	0.151	0.557	0.473	0.623	0.785	0.785	0.655	0.302	0.780	0.747	0.804			
R Square	0.754	0.023	0.310	0.224	0.388	0.616	0.616	0.428	0.091	0.609	0.558	0.647			
Adjusted R Square	0.631	-0.466	-0.035	-0.164	0.081	0.424	0.425	0.143	-0.363	0.413	0.337	0.470			
Manufacturing: Other Non-Metal Goods															
Multiple R	0.981	0.627	0.634	0.844	0.544	0.547	0.425	0.684	0.685	0.658	0.422	0.588	0.832	0.363	0.789
R Square	0.963	0.394	0.402	0.712	0.295	0.299	0.180	0.468	0.469	0.432	0.178	0.345	0.693	0.132	0.622
Adjusted R Square	0.944	0.091	0.104	0.568	-0.057	-0.052	-0.229	0.202	0.203	0.149	-0.233	0.018	0.539	-0.302	0.433
Manufacturing: Pharmaceuticals															
Multiple R				0.862			0.847							0.875	
R Square				0.744			0.717							0.765	
Adjusted R Square				0.615			0.576							0.648	
Manufacturing: Pulp & Paper / Publishing & Printing															
Multiple R	0.905	0.692	0.918	0.902	0.686	0.736	0.194	0.385	0.722	0.646	0.769	0.588	0.124	0.756	
R Square	0.818	0.479	0.843	0.815	0.471	0.542	0.038	0.148	0.521	0.417	0.592	0.345	0.015	0.572	
Adjusted R Square	0.728	0.219	0.765	0.722	0.207	0.314	-0.443	-0.278	0.282	0.125	0.388	0.018	-0.477	0.358	
Manufacturing: Radio, Television, Communication Equipment & Apparatus															
Multiple R				0.862			0.910							0.857	
R Square				0.743			0.829							0.734	
Adjusted R Square				0.615			0.743							0.600	

Continued

Investment per Industry & Total Investment (2000-2006)	POLSKIE																
	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPACKIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE	
Manufacturing: Rubber & Plastics																	
Multiple R	0.174	0.801	0.485	0.368	0.772	0.739	0.622	0.566	0.681	0.745	0.776	0.968	0.937	0.568	0.742	0.628	
R Square	0.030	0.642	0.235	0.135	0.595	0.546	0.387	0.320	0.464	0.556	0.603	0.937	0.937	0.568	0.551	0.394	
Adjusted R Square	-0.455	0.462	-0.148	-0.297	0.393	0.320	0.080	-0.020	0.195	0.333	0.404	0.906	0.906	0.352	0.326	0.092	
Manufacturing: Transport Equipment																	
Multiple R	0.810	0.947	0.684	0.616	0.808	0.234	0.351	0.840	0.913	0.815	0.574	0.785	0.785	0.481	0.742	0.593	
R Square	0.656	0.897	0.467	0.380	0.653	0.055	0.123	0.705	0.834	0.664	0.330	0.617	0.617	0.231	0.326	0.352	
Adjusted R Square	0.484	0.845	0.201	0.070	0.479	-0.418	-0.315	0.558	0.751	0.497	-0.006	0.425	0.425	-0.153	0.326	0.028	
Manufacturing: Wood & Wooden Products																	
Multiple R	0.633	0.530	0.670	0.438	0.438			0.591	0.407					0.742	0.593	0.593	
R Square	0.400	0.281	0.448	0.192	0.192			0.349	0.166					0.551	0.352	0.352	
Adjusted R Square	0.100	-0.078	0.172	-0.212	-0.212			0.024	-0.252					0.326	0.028	0.028	
Electricity, gas and water supply																	
Multiple R	0.449					0.603	0.874	0.286	0.090	0.737	0.605	0.157	0.651	0.456	0.456	0.217	
R Square	0.201					0.363	0.764	0.082	0.008	0.544	0.365	0.025	0.423	0.208	0.208	0.047	
Adjusted R Square	-0.198					0.045	0.647	-0.377	-0.488	0.315	0.048	-0.463	0.135	-0.188	-0.188	-0.429	

Construction										
Multiple R	0.724	0.346	0.878	0.810	0.435	0.477	0.976			
R Square	0.524	0.119	0.770	0.657	0.189	0.227	0.953			
Adjusted R Square	0.286	-0.321	0.656	0.485	-0.216	-0.159	0.929			
Trade and repair										
Multiple R	0.828	0.744	0.921	0.636	0.955	0.951	0.799	0.569	0.729	0.860
R Square	0.686	0.553	0.174	0.849	0.405	0.904	0.639	0.324	0.532	0.739
Adjusted R Square	0.528	0.330	-0.238	0.773	0.107	0.856	0.458	-0.014	0.297	0.608
Hotels and restaurants										
Multiple R	0.388	0.932	0.724	0.955	0.945	0.890	0.461	0.781	0.893	0.793
R Square	0.151	0.868	0.525	0.912	0.867	0.867	0.212	0.610	0.840	0.689
Adjusted R Square	-0.274	0.803	0.287	0.867			-0.182	0.415		
Transport, storage and communication* (2004–2006)										
Multiple R	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
R Square	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Financial intermediation										
Multiple R	0.781	0.889	0.663	0.833	0.649	0.775	0.407	0.941	0.600	0.166
R Square	0.609	0.790	0.439	0.694	0.422	0.401	-0.251	0.885	0.401	0.828
Adjusted R Square	0.414	0.686	0.159	0.541	0.133					
Real estate, rental and business activities										
Multiple R	0.643	0.267	0.431	0.832	0.616	0.971	0.676	0.604	0.971	0.215
R Square	0.413	0.072	0.185	0.692	0.379	0.943	0.457	0.365	0.943	0.046
Adjusted R Square	0.120	-0.393	-0.222	0.538	0.069	0.914	0.185	0.048	0.914	-0.431
Other community, social and personal service activities										
Multiple R	0.476	0.794	0.893	0.627	0.741	0.893	0.869	0.466	0.741	0.893
R Square	0.227	0.631	0.798	0.393	0.549	0.798	0.756	0.217	0.549	0.798
Adjusted R Square	-0.160	0.446	0.697	0.090	0.323	0.697	0.633	-0.174	0.323	0.697

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIIZ) and the author's own analysis.

Appendix 3a1 Results of regression – RLAs and amount of total regional investment in select industries (H3a) control

Investment per Industry (2000–2006)	DOLNOŚLĄSKIE										ZACHODNIOPOMORSKIE									
	KUJAWSKO-POMORSKIE	FÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPACKIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE					
Agriculture, hunting, and forestry																				
Multiple R			0.192										0.776	0.481						
R square			0.037										0.602	0.232						
Mining and quarrying																				
Multiple R	0.971				0.478	0.476	0.164				0.052									
R square	0.942				0.228	0.226	0.027				0.003									
Manufacturing: Chemicals and Chemical Products																				
Multiple R	0.653	0.088	0.240	0.339	0.496	0.084	0.047	0.832			0.381	0.431	0.425	0.666	0.063					
R square	0.427	0.008	0.057	0.115	0.108	0.246	0.007	0.692			0.145	0.186	0.180	0.443	0.004					
Manufacturing: Consumer Products																				
Multiple R	0.742					0.643								0.588	1.000					
R square	0.550					0.413								0.345	1.000					
Manufacturing: Electrical Machinery and Apparatus																				
Multiple R	0.809	0.525	0.586		0.175	0.175	0.392	0.392			0.039	0.730	0.451	0.232						
R Square	0.655	0.276	0.344		0.031	0.031	0.154	0.154			0.001	0.532	0.203	0.054						
Manufacturing: Fabrics and Textiles																				
Multiple R	0.551	0.688	0.173		0.112	0.874	0.892	0.857	0.446		0.508	0.470	0.538	0.851						
R square	0.303	0.473	0.030		0.013	0.764	0.796	0.735	0.199		0.258	0.221	0.289	0.724						

Manufacturing: Food, Drinks, and Tobacco Products																
Multiple R	0.114	0.163	0.385	0.467	0.435	0.404	0.769	0.587	0.086	0.776	0.094	0.073	0.773	0.926	0.109	0.655
R square	0.013	0.027	0.148	0.218	0.189	0.163	0.591	0.344	0.007	0.602	0.009	0.005	0.598	0.857	0.012	0.429
Manufacturing: Furniture ND Consumer Goods																
Multiple R	0.565	0.290		0.262			0.265				0.357	0.204		0.734	0.447	0.076
R square	0.319	0.084		0.069			0.070				0.128	0.042		0.539	0.200	0.006
Manufacturing: Glass																
Multiple R									0.900							
R square									0.810							
Manufacturing: Leather and Leather Products																
Multiple R	0.748	0.887		0.148			0.926		0.309							0.517
R square	0.559	0.787		0.022			0.858		0.095							0.267
Manufacturing: Machinery and Equipment																
Multiple R	0.101	0.647	0.419				0.372	0.478					0.408	0.781	0.752	0.680
R square	0.010	0.419	0.176				0.138	0.228					0.166	0.611	0.565	0.463
Manufacturing: Metals and Metal Products																
Multiple R	0.694	0.082	0.527	0.299	0.337	0.244	0.646	0.058	0.583	0.777	0.218	0.243	0.246			0.639
R square	0.481	0.007	0.278	0.089	0.113	0.060	0.417	0.003	0.339	0.603	0.047	0.059	0.061			0.408
Manufacturing: Other Non-Metal Goods																
Multiple R	0.757	0.609	0.563	0.498	0.299	0.494	0.296	0.599	0.501					0.475	0.077	0.489
R square	0.572	0.371	0.317	0.248	0.089	0.244	0.087	0.359	0.251					0.225	0.006	0.239
Manufacturing: Pharmaceuticals																
Multiple R			0.250				0.566									0.599
R square			0.062				0.320									0.359
Manufacturing: Pulp and Paper / Publishing and Printing																
Multiple R	0.891	0.261	0.918	0.272	0.635	0.724	0.061			0.360	0.575	0.638	0.335	0.549	0.029	0.756
R square	0.793	0.068	0.843	0.074	0.404	0.524	0.004			0.130	0.330	0.406	0.112	0.301	0.001	0.571

Continued

Construction													
Multiple R										0.353	0.079	0.477	0.935
R square										0.125	0.006	0.227	0.874
Trade and repair													
Multiple R	0.519	0.171	0.383	0.376	0.174	0.828	0.901	0.297	0.569	0.661	0.771	0.436	0.121
R square	0.269	0.029	0.146	0.141	0.030	0.685	0.812	0.088	0.324	0.437	0.594	0.190	0.015
Hotels and restaurants													
Multiple R	0.156			0.894	0.474		0.275		0.690	0.748		0.160	0.780
R square	0.024			0.798	0.225		0.076		0.476	0.560		0.025	0.608
Transport, storage, and communication* (2004–2006)													
Multiple R	0.064		0.584	0.534	0.778	0.492		1.000	0.962	0.800		1.000	0.194
R square	0.004		0.341	0.285	0.605	0.242		1.000	0.925	0.641		1.000	0.037
Financial intermediation													
Multiple R	0.455	0.605	0.659	0.828	0.366				0.335	0.386			0.938
R square	0.207	0.366	0.435	0.686	0.134				0.112	0.149			0.879
Real estate, rental, and business activities													
Multiple R	0.614		0.202	0.299	0.610	0.055			0.840	0.513			0.603
R square	0.377		0.041	0.090	0.372	0.003			0.705	0.263			0.364
Other community, social, and personal service activities													
Multiple R	0.330		0.034	0.680	0.255				0.188	0.872		0.461	0.274
R square	0.109		0.001	0.462	0.065				0.035	0.761		0.212	0.075

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIIZ) and the author's own analysis.

Appendix 3b Ratio for value added in years 2000 and 2006 in Millions Pln. (H3b)

PKD sections	2000	2006	Ratio
POLAND	662,224	931,179	1.406
Mean			1.308
Agriculture, hunting, and forestry	32,649	39,353	1.205
fishing	241	237	0.983
Mining and quarrying	13,572	16,860	1.242
Manufacturing	121942	182029	1.493
Electricity, gas, and water supply	18,688	26,751	1.431
construction	46954	55337	1.179
Trade and repair	134,411	186,798	1.390
Hotels and restaurants	8,562	10,576	1.235
Transport, storage, and communication	48,055	65,541	1.364
Financial intermediation	32,808	42,602	1.299
Real estate, rental, and business activities	83,700	130,305	1.557
other community, social, and personal service activities	25,669	33,963	1.323
DOLNOŚLĄSKIE	52,434	75,348	1.437
Mean			1.395
Agriculture, hunting, and forestry	1,829	1,653	0.904
fishing	6	13	2.167
Mining and quarrying	1,656	2,446	1.477
Manufacturing	10,458	19,576	1.872
Electricity, gas, and water supply	1383	2057	1.487
construction	3,744	4,451	1.189
Trade and repair	10189	13662	1.341
Hotels and restaurants	691	862	1.247
Transport, storage, and communication	3518	3949	1.123
Financial intermediation	3,011	2,735	0.908
Real estate, rental, and business activities	6663	10287	1.544
other community, social, and personal service activities	1,719	2,560	1.489
KUJAWSKO-POMORSKIE	32,772	44,113	1.346
Mean			1.375
Agriculture, hunting, and forestry	2,292	2,721	1.187
fishing	4	8	2.000
Mining and quarrying	37	41	1.108
Manufacturing	7418	9700	1.308
Electricity, gas, and water supply	501	910	1.816
construction	2344	2741	1.169
Trade and repair	6,848	9,847	1.438
Hotels and restaurants	334	465	1.392
Transport, storage, and communication	2,092	2,214	1.058

Continued

Appendix 3b Continued

PKD sections	2000	2006	Ratio
Financial intermediation	1129	1338	1.185
Real estate, rental, and business activities	3,677	5,407	1.470
other community, social, and personal service activities	1176	1678	1.4237
LUBELSKIE	26747	35884	1.342
Mean			1.258
Agriculture, hunting, and forestry	1178	2491	1.144
fishing	17	12	0.706
Mining and quarrying	406	431	1.062
Manufacturing	4234	5604	1.324
Electricity, gas, and water supply	433	752	1.737
construction	1700	2121	1.248
Trade and repair	5583	7544	1.351
Hotels and restaurants	308	392	1.273
Transport, storage, and communication	1896	2223	1.172
Financial intermediation	1187	1279	1.078
Real estate, rental, and business activities	2737	4215	1.540
other community, social, and personal service activities	757	1110	1.466
LUBUSKIE	15723	21910	1.393
Mean			1.469
Agriculture, hunting, and forestry	755	839	1.111
fishing	6	7	1.167
Mining and quarrying	267	915	3.427
Manufacturing	3030	4879	1.61
Electricity, gas, and water supply	296	437	1.476
construction	1025	1230	1.200
Trade and repair	3331	4446	1.335
Hotels and restaurants	198	287	1.449
Transport, storage, and communication	1246	1417	1.137
Financial intermediation	549	566	1.031
Real estate, rental, and business activities	1858	2623	1.412
other community, social, and personal service activities	592	754	1.274
ŁÓDZKIE	41006	57651	1.406
Mean			1.326
Agriculture, hunting, and forestry	2426	3526	1.453
fishing	3	2	0.667
Mining and quarrying	647	899	1.389
Manufacturing	8318	12012	1.444
Electricity, gas, and water supply	1560	1979	1.269
construction	2295	3284	1.431

Continued

Appendix 3b Continued

PKD sections	2000	2006	Ratio
Trade and repair	8796	12326	1.401
Hotels and restaurants	433	642	1.483
Transport, storage, and communication	2489	2789	1.121
Financial intermediation	1253	1946	1.553
Real estate, rental, and business activities	5159	7657	1.484
other community, social, and personal service activities	1344	1641	1.221
MAŁOPOLSKIE	48444	69212	1.429
Mean			1.316
Agriculture, hunting, and forestry	1694	1930	1.139
fishing	4	4	1.000
Mining and quarrying	770	836	1.086
Manufacturing	9409	14188	1.508
Electricity, gas, and water supply	1183	1596	1.349
construction	3800	4673	1.23
Trade and repair	10540	14663	1.391
Hotels and restaurants	832	1115	1.34
Transport, storage, and communication	3398	3865	1.137
Financial intermediation	1556	2337	1.502
Real estate, rental, and business activities	5893	9900	1.68
other community, social, and personal service activities	1669	2395	1.435
MAZOWIECKIE	133607	201350	1.507
Mean			1.386
Agriculture, hunting, and forestry	5411	7579	1.401
fishing	7	7	1.000
Mining and quarrying	73	87	1.192
Manufacturing	19629	25558	1.302
Electricity, gas, and water supply	4593	7679	1.672
construction	8335	9772	1.172
Trade and repair	25653	38663	1.507
Hotels and restaurants	1909	1939	1.016
Transport, storage, and communication	11776	23283	1.977
Financial intermediation	12154	18836	1.550
Real estate, rental, and business activities	20039	34183	1.706
other community, social, and personal service activities	8547	9725	1.138
OPOLSKIE	15677	20501	1.308
Mean			1.206
Agriculture, hunting, and forestry	1055	1074	1.018
fishing	3	4	1.333
Mining and quarrying	90	85	0.944
Manufacturing	3125	4530	1.45
Electricity, gas, and water supply	925	1058	1.144

Continued

Appendix 3b Continued

PKD sections	2000	2006	Ratio
construction	1255	1266	1.009
Trade and repair	2707	3806	1.406
Hotels and restaurants	168	199	1.185
Transport, storage, and communication	1129	1079	0.956
Financial intermediation	582	552	0.948
Real estate, rental, and business activities	1645	2527	1.536
other community, social, and personal service activities	449	698	1.555
PODKARPACKIE	25367	35044	1.381
Mean			1.228
Agriculture, hunting, and forestry	1134	1080	0.952
fishing	6	4	0.667
Mining and quarrying	309	187	0.605
Manufacturing	5925	8378	1.414
Electricity, gas, and water supply	529	823	1.556
construction	1846	2159	1.17
Trade and repair	5164	7341	1.422
Hotels and restaurants	262	336	1.282
Transport, storage, and communication	1514	1919	1.268
Financial intermediation	758	976	1.288
Real estate, rental, and business activities	2523	3847	1.525
other community, social, and personal service activities	733	1171	1.598
PODLASKIE	15782	21457	1.36
Mean			1.316
Agriculture, hunting, and forestry	1565	2484	1.587
fishing	3	4	1.333
Mining and quarrying	30	27	0.900
Manufacturing	2571	3362	1.308
Electricity, gas, and water supply	298	425	1.426
construction	1015	1217	1.199
Trade and repair	3114	4173	1.34
Hotels and restaurants	182	234	1.286
Transport, storage, and communication	1127	1156	1.026
Financial intermediation	459	657	1.431
Real estate, rental, and business activities	1813	2557	1.41
other community, social, and personal service activities	480	747	1.556
POMORSKIE	37296	52927	1.419
Mean			1.333
Agriculture, hunting, and forestry	1165	1319	1.132
fishing	67	78	1.164
Mining and quarrying	250	331	1.324
Manufacturing	7843	11160	1.423

Continued

Appendix 3b Continued

PKD sections	2000	2006	Ratio
Electricity, gas, and water supply	657	1017	1.548
construction	2918	3526	1.208
Trade and repair	6814	10106	1.483
Hotels and restaurants	499	591	1.184
Transport, storage, and communication	3189	4322	1.355
Financial intermediation	2012	2565	1.275
Real estate, rental, and business activities	5008	7802	1.558
other community, social, and personal service activities	1435	1929	1.344
ŚLĄSKIE	89070	121189	1.361
Mean			1.185
Agriculture, hunting, and forestry	1776	1263	0.711
fishing	7	4	0.571
Mining and quarrying	8363	9684	1.158
Manufacturing	15270	26129	1.711
Electricity, gas, and water supply	3186	3962	1.244
construction	6851	7497	1.094
Trade and repair	18703	23763	1.271
Hotels and restaurants	1065	1353	1.271
Transport, storage, and communication	5707	7271	1.274
Financial intermediation	3147	3370	1.071
Real estate, rental, and business activities	12040	17385	1.444
other community, social, and personal service activities	2782	3908	1.405
ŚWIĘTOKRZYSKIE	17491	23792	1.36
Mean			1.206
Agriculture, hunting, and forestry	1226	1474	1.202
fishing	4	2	1.500
Mining and quarrying	145	199	1.372
Manufacturing	3165	4886	1.544
Electricity, gas, and water supply	643	670	1.042
construction	1492	1547	1.037
Trade and repair	3767	5493	1.458
Hotels and restaurants	190	277	1.458
Transport, storage, and communication	1150	1274	1.108
Financial intermediation	539	525	0.974
Real estate, rental, and business activities	1709	2510	1.469
other community, social, and personal service activities	460	604	1.313
WARMIŃSKO-MAZURSKIE	19324	26333	1.363
Mean			1.348
Agriculture, hunting, and forestry	1974	2146	1.087
fishing	22	21	0.955

Continued

Appendix 3b Continued

PKD sections	2000	2006	Ratio
Mining and quarrying	31	58	1.871
Manufacturing	3447	5163	1.498
Electricity, gas, and water supply	374	528	1.412
construction	1323	1527	1.154
Trade and repair	3704	5029	1.358
Hotels and restaurants	281	350	1.246
Transport, storage, and communication	1236	1346	1.089
Financial intermediation	538	819	1.522
Real estate, rental, and business activities	2130	3314	1.556
other community, social, and personal service activities	666	957	1.437
WIELKOPOLSKIE	61593	86795	1.409
Mean			1.314
Agriculture, hunting, and forestry	4724	6140	1.300
fishing	10	12	1.200
Mining and quarrying	451	579	1.284
Manufacturing	13196	21438	1.625
Electricity, gas, and water supply	1257	1651	1.313
construction	4886	5809	1.189
Trade and repair	13178	17708	1.344
Hotels and restaurants	697	894	1.283
Transport, storage, and communication	3860	4799	1.243
Financial intermediation	2874	2919	1.016
Real estate, rental, and business activities	6659	10278	1.543
other community, social, and personal service activities	1777	2556	1.438
ZACHODNIOPOMORSKIE	29891	37674	1.26
Mean			1.189
Agriculture, hunting, and forestry	1445	1635	1.131
fishing	69	56	0.812
Mining and quarrying	45	54	1.200
Manufacturing	4905	55464	1.114
Electricity, gas, and water supply	868	1206	1.389
construction	2126	2517	1.184
Trade and repair	6320	8229	1.302
Hotels and restaurants	512	640	1.250
Transport, storage, and communication	2727	2636	0.967
Financial intermediation	1059	1181	1.115
Real estate, rental, and business activities	4147	5813	1.402
other community, social, and personal service activities	1083	1531	1.414

Source: Based on data obtained from the Central Statistical Office (GUS) and the Polish Information and Foreign Investment Agency (PAIIZ) and the author's own analysis.

Appendix 3c Results of regression between RLAs and labor cost (H3c)

	Wage 2002-2006															
	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPAKIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE
Agriculture, hunting and forestry																
Multiple R			1.000	1.000							0.931			0.779	0.193	
R Square											0.867			0.607	0.037	
Construction																
Multiple R			1.000			0.336	0.013				0.835	0.054	0.548		0.694	
R Square			1.000			0.113	0.000				0.696	0.003	0.300		0.481	
Electricity, gas and water supply																
Multiple R	0.515					0.779	0.109		0.747	0.603	0.846	0.811	0.514	0.692	0.797	0.236
R Square	0.266					0.607	0.012		0.558	0.363	0.716	0.657	0.264	0.479	0.635	0.056
Financial intermediation																
Multiple R	0.449	0.148	0.471		0.656		0.292				0.844	0.447			0.387	
R Square	0.202	0.022	0.222		0.430		0.085				0.712	0.200			0.150	
Hotels and restaurants																
Multiple R	0.930			1.000	0.733		0.477				0.974	0.884			0.937	0.724
R Square	0.865			1.000	0.538		0.228				0.948	0.781			0.878	0.524

Manufacturing: Chemicals & Chemical Products														
Multiple R	0.790	0.743	0.229	0.170	0.929	0.927	0.773	0.876	0.773	0.667	0.984	1.000	0.142	0.062
R Square	0.624	0.552	0.053	0.029	0.864	0.860	0.598	0.767	0.598	0.445	0.968	1.000	0.020	0.004
Manufacturing: Consumer Products														
Multiple R	0.957		0.173				0.782						0.381	1.000
R Square	0.915		0.030				0.611						0.145	1.000
Manufacturing: Electrical Machinery and Apparatus														
Multiple R	0.841	0.450	0.339				0.507	0.911		0.852	0.583		0.609	0.177
R Square	0.707	0.203	0.115				0.257	0.830		0.725	0.340		0.370	0.031
Manufacturing: Fabrics & Textiles														
Multiple R	0.661	0.757	0.313		0.105	0.807	0.427	0.313		0.431			0.285	0.704
R Square	0.437	0.572	0.098		0.011	0.651	0.182	0.098		0.185			0.081	0.495
Manufacturing: Food, Drinks & Tobacco Products														
Multiple R	0.903	0.078	0.671	0.655	0.888	0.493	0.135	0.414	0.625	0.477	0.516	0.366	0.903	0.932
R Square	0.816	0.006	0.450	0.429	0.788	0.243	0.018	0.172	0.390	0.227	0.266	0.134	0.815	0.869
Manufacturing: Furniture & Consumer Goods														
Multiple R	0.604	0.883		0.574			0.607			0.510	0.078		0.861	0.964
R Square	0.365	0.780		0.329			0.369			0.260	0.006		0.741	0.930
Manufacturing: Glass														
Multiple R									0.200					
R Square									0.040					
Manufacturing: Leather & Leather Products														
Multiple R	0.922	0.404		0.574			0.263		0.202				0.730	
R Square	0.850	0.163		0.330			0.069		0.041				0.533	
Manufacturing: Machinery & Equipment														
Multiple R	0.682		0.247	0.437			0.270	0.393		0.857	0.703	0.489	0.697	0.743
R Square	0.465		0.061	0.191			0.073	0.154		0.735	0.494	0.240	0.486	0.552

Continued

Wage 2002-2006	KUJAWSKO-POMORSKIE	FÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPACKIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE			
Manufacturing: Metals & Metal Products																		
Multiple R	0.686	0.757	0.404	0.336	0.071	0.411	0.660	0.130	0.475	0.186	0.177	0.626	0.547	0.111	0.437	0.341	0.901	0.359
R Square	0.470	0.574	0.163	0.113	0.005	0.169	0.436	0.017	0.225	0.035	0.031	0.392	0.299	0.012	0.191	0.117	0.812	0.129
Manufacturing: Other Non-Metal Goods																		
Multiple R	0.826	0.021	0.465	0.304	0.132	0.114	0.806	0.143	0.324	0.547	0.111	0.437	0.341	0.901	0.359			
R Square	0.683	0.000	0.216	0.092	0.017	0.013	0.650	0.020	0.105	0.299	0.012	0.191	0.117	0.812	0.129			
Manufacturing: Pharmaceuticals																		
Multiple R			0.525				0.284									0.193		
R Square			0.275				0.081									0.037		
Manufacturing: Pulp & Paper / Publishing & Printing																		
Multiple R	0.947	0.866	0.418	0.837	0.814	0.017	0.825			1.000	0.906	0.881	0.114	0.735	0.751	0.878		
R Square	0.897	0.751	0.174	0.700	0.662	0.000	0.681			1.000	0.820	0.776	0.013	0.540	0.564	0.771		
Manufacturing: Radio, Television, Communication Equipment & Apparatus																		
Multiple R	0.450						0.138									0.193		
R Square	0.203						0.019									0.037		

Manufacturing: Rubber & Plastics														
Multiple R	0.478	0.925	0.218	0.280	0.775	0.147	0.101	0.692	0.698	0.486	0.852	0.866	0.021	0.709
R Square	0.228	0.856	0.047	0.079	0.600	0.022	0.010	0.479	0.487	0.236	0.727	0.750	0.000	0.503
Manufacturing: Transport Equipment														
Multiple R	0.968	0.368	0.315	0.348	0.563	0.513	0.736	0.464	0.633	0.824	0.051	0.708	0.897	0.804
R Square	0.936	0.136	0.099	0.121	0.317	0.263	0.542	0.215	0.401	0.679	0.003	0.501	0.804	0.804
Manufacturing: Wood & Wooden Products														
Multiple R	0.611	0.070	0.894	0.263	0.894	0.263	0.894	0.263	0.402	0.881	0.402	0.881	0.798	0.887
R Square	0.373	0.005	0.799	0.069	0.799	0.069	0.799	0.069	0.161	0.776	0.161	0.776	0.636	0.786
Mining and quarrying														
Multiple R	0.997					0.614	0.972	0.550			0.917			
R Square	0.993					0.377	0.945	0.303			0.840			
Other community, social and personal service activities														
Multiple R	0.789		0.561			0.320	0.450			0.679	0.897	0.474	0.248	
R Square	0.622		0.315			0.103	0.203			0.461	0.804	0.224	0.061	
Real estate, rental and business activities														
Multiple R	0.294		0.423			0.498	0.540	0.106		0.741	0.659	0.179	0.751	
R Square	0.087		0.179			0.248	0.291	0.011		0.549	0.435	0.032	0.565	
Trade and repair														
Multiple R	0.427	0.603	0.387	0.487	1.000	0.456	0.781	0.724	0.715	0.826	0.650	0.853	0.745	
R Square	0.182	0.364	0.150	0.237	1.000	0.208	0.610	0.524	0.511	0.682	0.422	0.728	0.554	

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIIZ) and the author's own analysis.

Appendix 3d Results of regression between RLAs and labor and skilled labor availability (H3d)

2000-2006 Total available workforce (including skilled)	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MALOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPACIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIETKOPOLSKIE	ZACHODNIOPOMORSKIE
Agriculture, hunting and forestry																
Multiple R	0.463										0.610			0.917	0.999	
R Square	0.215										0.372			0.842	0.998	
Construction																
Multiple R			0.667			0.672	0.897				0.481	0.566	0.719		0.143	
R Square			0.445			0.451	0.805				0.231	0.321	0.517		0.020	
Financial intermediation																
Multiple R	0.175	0.822	0.481	0.332	0.186						0.735	0.740			0.441	
R Square	0.031	0.675	0.232	0.110	0.035						0.540	0.548			0.195	
Hotels and restaurants																
Multiple R	0.533			0.117	0.494		0.050				0.556	0.226			0.863	0.130
R Square	0.284			0.014	0.244		0.002				0.309	0.051			0.745	0.017
Manufacturing: Chemicals & Chemical Products																
Multiple R	0.673	0.143	0.388	0.175	0.747	0.297	0.354	0.895	0.288		0.151	0.042	0.667		0.512	0.053
R Square	0.453	0.020	0.151	0.031	0.558	0.088	0.126	0.801	0.083		0.023	0.002	0.445		0.262	0.003
Manufacturing: Consumer Products																
Multiple R	0.675		0.220				0.715								0.451	1.000
R Square	0.456		0.049				0.512								0.203	1.000

Manufacturing: Electrical Machinery and Apparatus														
Multiple R	0.278	0.143	0.530				0.524	0.222	0.085	0.552	0.505	0.787		
R Square	0.077	0.020	0.281				0.274	0.049	0.007	0.305	0.255	0.619		
Manufacturing: Fabrics & Textiles														
Multiple R	0.401	0.222	0.202	0.775	0.112	0.800	0.183	0.053	0.491	0.187	0.689	0.827		
R Square	0.160	0.049	0.041	0.601	0.013	0.640	0.034	0.003	0.241	0.035	0.474	0.685		
Manufacturing: Food, Drinks & Tobacco Products														
Multiple R	0.660	0.888	0.579	0.885	0.410	0.634	0.879	0.846	0.225	0.170	0.722	0.049	0.589	
R Square	0.435	0.789	0.335	0.784	0.168	0.401	0.772	0.716	0.050	0.029	0.208	0.002	0.347	
Manufacturing: Furniture & Consumer Goods														
Multiple R	0.127	0.318		0.779		0.235			0.486	0.628	0.650	0.872		
R Square	0.016	0.101		0.607		0.055			0.236	0.395	0.422	0.761		
Manufacturing: Glass														
Multiple R								0.204						
R Square								0.041						
Manufacturing: Leather & Leather Products														
Multiple R	0.035	0.053		0.558		0.753		0.240				0.078		
R Square	0.001	0.003		0.311		0.566		0.058				0.006		
Manufacturing: Machinery & Equipment														
Multiple R	0.210	0.312	0.489			0.835	0.200		0.195	0.599	0.718	0.937	0.298	
R Square	0.044	0.097	0.239			0.698	0.040		0.038	0.359	0.515	0.878	0.089	
Manufacturing: Metals & Metal Products														
Multiple R	0.507	0.243	0.538	0.128	0.057	0.491	0.475	0.589	0.102	0.664	0.596	0.653	0.152	
R Square	0.257	0.059	0.290	0.016	0.003	0.241	0.577	0.347	0.010	0.441	0.356	0.427	0.023	
Manufacturing: Other Non-Metal Goods														
Multiple R	0.534	0.331	0.722	0.272	0.082	0.303	0.508	0.148	0.576	0.053	0.016	0.220	0.161	0.496
R Square	0.285	0.110	0.521	0.074	0.007	0.092	0.258	0.022	0.332	0.003	0.000	0.048	0.026	0.246
Manufacturing: Pharmaceuticals														
Multiple R				0.669		0.053						0.570		
R Square				0.448		0.003						0.325		

Continued

2000-2006 Total available workforce (including skilled)	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MALOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPACIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIĘLKOPOLSKIE	ZACHODNIOPOMORSKIE
Manufacturing: Pulp & Paper / Publishing & Printing																
Multiple R	0.423	0.094	0.084	0.820	0.646	0.355	0.088			0.849	0.282	0.157	0.060	0.621	0.105	0.147
R Square	0.179	0.009	0.007	0.672	0.418	0.126	0.008			0.721	0.080	0.025	0.004	0.385	0.011	0.021
Manufacturing: Radio, Television, Communication Equipment & Apparatus																
Multiple R	0.143						0.134								0.737	
R Square	0.020						0.018								0.544	
Manufacturing: Rubber & Plastics																
Multiple R	0.724	0.247	0.316	0.334	0.298	0.328	0.814		0.192	0.383	0.300	0.229		0.791	0.331	0.083
R Square	0.525	0.061	0.100	0.111	0.089	0.108	0.663		0.037	0.146	0.090	0.052		0.626	0.110	0.007
Manufacturing: Transport Equipment																
Multiple R	0.847	0.080	0.717	0.474	0.785	0.180	0.236	0.066	0.301		0.677	0.257	0.724		0.703	
R Square	0.717	0.006	0.514	0.225	0.617	0.032	0.056	0.004	0.090		0.458	0.066	0.523		0.494	

Manufacturing: Wood & Wooden Products										
Multiple R	0.327	0.544	0.367	0.168	0.117	0.332	0.117	0.332	0.765	0.770
R Square	0.107	0.296	0.134	0.028	0.014	0.110	0.014	0.110	0.585	0.593
Other community, social and personal service activities										
Multiple R	0.610	0.505	0.721	0.399	0.366	0.921	0.366	0.921	0.058	0.327
R Square	0.372	0.255	0.520	0.159	0.134	0.849	0.134	0.849	0.003	0.107
Real estate, rental and business activities										
Multiple R	0.654	0.857	0.409	0.871	0.404	0.734	0.859	0.734	0.598	0.758
R Square	0.428	0.734	0.167	0.759	0.164	0.539	0.738	0.539	0.357	0.574
Trade and repair										
Multiple R	0.799	0.059	0.302	0.736	0.513	0.983	0.560	0.871	0.617	0.063
R Square	0.639	0.004	0.091	0.542	0.263	0.965	0.313	0.759	0.296	0.381
Transport, storage and communication* (2004-2006)										
Multiple R	0.541	0.972	0.359	0.718	0.665	0.424	0.830	0.424	1.000	0.321
R Square	0.293	0.944	0.129	0.515	0.442	0.180	0.689	0.180	1.000	0.103

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIIZ) and the author's own analysis.

Appendix 3d1 Results of regression between RLAs and skilled labor availability (H3d)

Secondary Unemployment (2000-2006)	DOLNOŚLAŃSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MALOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPACIE	PODLASKIE	POMORSKIE	ŚLAŃSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE
Agriculture, hunting and forestry																
Multiple R			0.491								0.557			0.549	0.122	
R Square			0.242								0.310			0.301	0.015	
Mining and quarrying																
Multiple R	0.886					0.538	0.063	0.380				0.125				
R Square	0.785					0.290	0.004	0.144				0.016				
Manufacturing: Chemicals & Chemical Products																
Multiple R	0.791	0.495	0.303	0.223	0.823	0.527	0.069	0.574	0.329		0.308	0.326	0.343		0.197	0.220
R Square	0.626	0.245	0.092	0.050	0.677	0.277	0.005	0.329	0.109		0.095	0.106	0.118		0.039	0.048
Manufacturing: Consumer Products																
Multiple R	0.736		0.379												0.146	1.000
R Square	0.541		0.143												0.021	1.000
Manufacturing: Electrical Machinery and Apparatus																
Multiple R	0.415	0.641	0.401			0.125			0.558		0.319	0.874			0.015	0.406
R Square	0.172	0.411	0.161			0.016			0.312		0.102	0.764			0.000	0.165
Manufacturing: Fabrics & Textiles																
Multiple R	0.256	0.322	0.001		0.439	0.754	0.144	0.571		0.530		0.114	0.455	0.631	0.194	
R Square	0.065	0.104	0.000		0.193	0.569	0.021	0.326		0.281		0.013	0.207	0.398	0.038	

Manufacturing: Food, Drinks & Tobacco Products																
Multiple R	0.625	0.505	0.470	0.779	0.171	0.415	0.285	0.100	0.521	0.565	0.137	0.142	0.701	0.595	0.090	0.179
R Square	0.391	0.255	0.221	0.606	0.029	0.172	0.081	0.010	0.272	0.319	0.019	0.020	0.491	0.354	0.008	0.032
Manufacturing: Furniture & Consumer Goods																
Multiple R	0.088	0.226		0.619		0.836				0.425	0.448			0.743	0.488	0.762
R Square	0.008	0.051		0.383		0.700				0.181	0.201			0.552	0.238	0.581
Manufacturing: Glass																
Multiple R									0.491							
R Square									0.241							
Manufacturing: Leather & Leather Products																
Multiple R	0.618	0.804		0.450		0.108			0.137				0.134	0.573	0.817	0.522
R Square	0.382	0.647		0.202		0.012			0.019				0.018	0.328	0.667	0.272
Manufacturing: Machinery & Equipment																
Multiple R	0.300	0.527	0.541			0.584	0.378									0.250
R Square	0.090	0.278	0.292			0.341	0.143									0.062
Manufacturing: Metals & Metal Products																
Multiple R	0.348	0.480	0.510	0.095	0.249	0.387	0.646	0.290	0.053	0.711	0.224	0.423	0.204		0.005	0.289
R Square	0.121	0.230	0.260	0.009	0.062	0.149	0.417	0.084	0.003	0.506	0.050	0.179	0.042		0.000	0.083
Manufacturing: Other Non-Metal Goods																
Multiple R	0.388	0.101	0.234	0.279	0.371	0.225	0.005	0.068	0.474		0.534	0.009	0.343	0.293	0.449	0.152
R Square	0.150	0.010	0.055	0.078	0.137	0.051	0.000	0.005	0.225		0.285	0.000	0.118	0.086	0.202	0.023
Manufacturing: Pharmaceuticals																
Multiple R				0.709		0.427										0.395
R Square				0.503		0.183										0.156
Manufacturing: Pulp & Paper / Publishing & Printing																
Multiple R	0.492	0.590	0.784	0.705	0.896	0.720	0.475			0.019	0.477	0.305	0.037	0.396	0.510	0.382
R Square	0.242	0.348	0.615	0.498	0.802	0.519	0.225			0.000	0.227	0.093	0.001	0.157	0.260	0.146

Continued

Secondary Unemployment (2000-2006)	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPACKIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE
Manufacturing: Radio, Television, Communication Equipment & Apparatus																
Multiple R	0.641						0.313								0.142	
R Square	0.411						0.098								0.020	
Manufacturing: Rubber & Plastics																
Multiple R	0.518	0.373	0.368	0.254	0.279	0.400	0.532		0.563	0.598	0.443	0.516		0.788	0.243	0.466
R Square	0.269	0.139	0.136	0.065	0.078	0.160	0.283		0.317	0.357	0.196	0.266		0.620	0.059	0.217
Manufacturing: Transport Equipment																
Multiple R	0.876	0.276	0.579	0.536	0.523	0.332	0.554	0.645	0.681		0.661	0.142	0.380		0.703	
R Square	0.767	0.076	0.335	0.287	0.273	0.110	0.307	0.416	0.464		0.437	0.020	0.145		0.494	
Manufacturing: Wood & Wooden Products																
Multiple R	0.369	0.503		0.306	0.139				0.375	0.238					0.431	0.962
R Square	0.136	0.253		0.094	0.019				0.141	0.057					0.186	0.926
Electricity, gas and water supply																
Multiple R	0.436					0.443	0.312		0.235	0.331	0.495	0.176	0.354	0.250	0.384	0.306
R Square	0.190					0.196	0.097		0.055	0.109	0.245	0.031	0.125	0.062	0.147	0.093

Appendix 3d2 Results of regression between RLAs and skilled labor availability (H3d)

Tertiary Unemployment (2000-2006)	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPAKIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE
Agriculture, hunting and forestry																
Multiple R	0.354										0.301			0.633	0.822	
R Square	0.125										0.091			0.400	0.676	
Mining and quarrying																
Multiple R	0.071					0.717	0.837	0.785				0.140				
R Square	0.005					0.513	0.701	0.616				0.020				
Manufacturing: Chemicals & Chemical Products																
Multiple R	0.078	0.277	0.333	0.734	0.359	0.478	0.493	0.646	0.892		0.222	0.596	0.806		0.925	0.094
R Square	0.006	0.077	0.111	0.538	0.129	0.229	0.243	0.418	0.796		0.049	0.355	0.650		0.855	0.009
Manufacturing: Consumer Products																
Multiple R	0.073		0.321			0.805									0.758	1.000
R Square	0.005		0.103			0.648									0.575	1.000
Manufacturing: Electrical Machinery and Apparatus																
Multiple R	0.433	0.186	0.760			0.534			0.173		0.385	0.021			0.707	0.864
R Square	0.188	0.035	0.577			0.285			0.030		0.148	0.000			0.500	0.747
Manufacturing: Fabrics & Textiles																
Multiple R	0.523	0.577	0.288	0.879	0.591	0.899	0.506			0.021		0.916	0.707	0.345	0.825	
R Square	0.273	0.333	0.083	0.773	0.349	0.808	0.256			0.000		0.839	0.499	0.119	0.681	

Manufacturing: Food, Drinks & Tobacco Products																
Multiple R	0.624	0.924	0.633	0.219	0.936	0.529	0.771	0.976	0.300	0.694	0.306	0.501	0.404	0.808	0.048	0.858
R Square	0.389	0.854	0.400	0.048	0.877	0.279	0.594	0.952	0.090	0.482	0.093	0.251	0.163	0.653	0.002	0.735
Manufacturing: Furniture & Consumer Goods																
Multiple R	0.898	0.512		0.066			0.145				0.217	0.816		0.415	0.499	0.709
R Square	0.806	0.262		0.004			0.021				0.047	0.666		0.172	0.249	0.502
Manufacturing: Glass																
Multiple R									0.836							
R Square									0.700							
Manufacturing: Leather & Leather Products																
Multiple R	0.311	0.277		0.304			0.838		0.243							0.401
R Square	0.096	0.077		0.092			0.702		0.059							0.161
Manufacturing: Machinery & Equipment																
Multiple R	0.506		0.326	0.859			0.888	0.049					0.817	0.168	0.282	0.645
R Square	0.256		0.106	0.738			0.789	0.002					0.668	0.028	0.080	0.416
Manufacturing: Metals & Metal Products																
Multiple R	0.683	0.082	0.590	0.440	0.334	0.599	0.765	0.506	0.893	0.815	0.533	0.933	0.651			0.580
R Square	0.467	0.007	0.348	0.193	0.112	0.359	0.585	0.256	0.797	0.663	0.284	0.871	0.424			0.337
Manufacturing: Other Non-Metal Goods																
Multiple R	0.748	0.619	0.677	0.112	0.099	0.761	0.756	0.791	0.563				0.187	0.356	0.353	0.699
R Square	0.559	0.383	0.458	0.013	0.010	0.579	0.571	0.625	0.317				0.035	0.127	0.125	0.488
Manufacturing: Pharmaceuticals																
Multiple R				0.597			0.006									0.007
R Square				0.356			0.000									0.000
Manufacturing: Pulp & Paper / Publishing & Printing																
Multiple R	0.648	0.220	0.175	0.278	0.079	0.243	0.160						0.771	0.139	0.778	0.189
R Square	0.420	0.049	0.031	0.077	0.006	0.059	0.026						0.595	0.019	0.606	0.036

Continued

Tertiary Unemployment (2000-2006)	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPAKIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE
Manufacturing: Radio, Television, Communication Equipment & Apparatus																
Multiple R	0.186						0.267								0.818	
R Square	0.035						0.071								0.669	
Manufacturing: Rubber & Plastics																
Multiple R	0.351	0.556	0.476	0.675	0.848	0.746	0.683		0.468	0.790	0.159	0.435		0.031	0.255	0.404
R Square	0.123	0.309	0.227	0.456	0.719	0.556	0.466		0.219	0.624	0.025	0.189		0.001	0.065	0.163
Manufacturing: Transport Equipment																
Multiple R	0.160	0.181	0.437	0.860	0.731	0.385	0.296	0.136	0.769		0.378	0.341	0.460		0.065	
R Square	0.026	0.033	0.191	0.740	0.534	0.149	0.088	0.018	0.591		0.143	0.116	0.212		0.004	
Manufacturing: Wood & Wooden Products																
Multiple R	0.059	0.325		0.075	0.093				0.228	0.236					0.408	0.471
R Square	0.003	0.106		0.006	0.009				0.052	0.056					0.166	0.222
Electricity, gas and water supply																
Multiple R	0.563						0.079	0.562	0.251	0.296	0.207	0.135	0.720	0.967	0.367	0.415
R Square	0.317						0.006	0.316	0.063	0.087	0.043	0.018	0.518	0.935	0.135	0.172

Construction										
Multiple R										
R Square	0.689	0.773	0.907	0.492	0.501	0.821	0.424			
	0.474	0.598	0.822	0.242	0.251	0.674	0.180			
Trade and repair										
Multiple R	0.315	0.860	0.438	0.500	0.934	0.621	0.618	0.282	0.345	0.149
R Square	0.099	0.740	0.192	0.250	0.872	0.385	0.382	0.080	0.119	0.022
Hotels and restaurants										
Multiple R	0.867		0.877	0.745		0.701		0.424	0.463	0.485
R Square	0.752		0.770	0.555		0.491		0.180	0.215	0.235
Transport, storage and communication* (2004–2006)										
Multiple R	0.512	0.897		0.979		0.254		0.974	0.989	1.000
R Square	0.262	0.804		0.958		0.065		0.948	0.978	1.000
Financial intermediation										
Multiple R	0.548	0.452	0.856		0.992		0.481		0.478	0.933
R Square	0.301	0.204	0.732		0.984		0.232		0.228	0.185
Real estate, rental and business activities										
Multiple R	0.900		0.585		0.430	0.806	0.450		0.784	0.497
R Square	0.811		0.343		0.185	0.65	0.203		0.614	0.247
Other community, social and personal service activities										
Multiple R	0.626		0.059		0.812	0.577		0.505	0.818	0.546
R Square	0.392		0.003		0.659	0.333		0.255	0.668	0.298

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIIZ) and the author's own analysis.

Appendix 3e Results of regression between RLais and market size and wages (H3e)

Wage and Population = Market size (2002-2006)	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPACIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE
Agriculture, hunting and forestry																
Multiple R	1.00										0.93			0.88	0.84	
R Square	1.00										0.87			0.77	0.71	
Construction																
Multiple R	1.00		1.00		0.80	0.64					0.83	0.80	0.76	0.88		
R Square	1.00		1.00		0.63	0.41					0.70	0.64	0.58	0.78		
Electricity, gas and water supply																
Multiple R	0.91				0.78	0.47			0.99	0.77	0.96	0.84	0.79	0.73	0.90	0.43
R Square	0.84				0.61	0.22			0.99	0.59	0.92	0.70	0.62	0.53	0.80	0.19
Financial intermediation																
Multiple R	0.68	0.16	0.74	0.89		0.73					0.98	0.49		0.65		
R Square	0.46	0.03	0.55	0.79		0.53					0.95	0.24		0.42		
Hotels and restaurants																
Multiple R	0.95			1.00	0.88	0.63					0.99	0.92		0.97	0.94	
R Square	0.90			1.00	0.78	0.40					0.98	0.84		0.94	0.88	
Manufacturing: Chemicals & Chemical Products																
Multiple R	0.83	0.81	0.24	0.37	0.95	0.93	0.83	0.88	0.84		0.89	0.98	1.00	0.65	0.51	
R Square	0.70	0.66	0.06	0.14	0.91	0.86	0.68	0.77	0.71		0.79	0.97	1.00	0.42	0.26	

Manufacturing: Consumer Products										
Multiple R	0.97	0.38							0.60	1.00
R Square	0.95	0.15							0.36	1.00
Manufacturing: Electrical Machinery and Apparatus										
Multiple R	0.93	0.96	0.74						0.63	0.35
R Square	0.87	0.91	0.55						0.40	0.12
Manufacturing: Fabrics & Textiles										
Multiple R	0.66	0.76	0.57	0.55	1.00	0.73	0.80	0.94	0.35	0.95
R Square	0.44	0.58	0.33	0.30	0.99	0.53	0.65	0.88	0.12	0.90
Manufacturing: Food, Drinks & Tobacco Products										
Multiple R	0.93	0.95	0.71	0.95	0.92	0.73	0.15	0.92	0.86	0.90
R Square	0.86	0.91	0.50	0.91	0.85	0.53	0.02	0.85	0.73	0.81
Manufacturing: Furniture & Consumer Goods										
Multiple R	0.62	0.88	0.89						0.66	0.73
R Square	0.38	0.78	0.79						0.44	0.54
Manufacturing: Glass										
Multiple R										0.99
R Square										0.99
Manufacturing: Leather & Leather Products										
Multiple R	0.93	0.99		0.82		0.70	0.90			0.81
R Square	0.86	0.98		0.68		0.49	0.82			0.65
Manufacturing: Machinery & Equipment										
Multiple R	0.99	0.53	0.86			0.95	0.69		0.90	0.86
R Square	0.97	0.28	0.74			0.90	0.48		0.80	0.73
Manufacturing: Metals & Metal Products										
Multiple R	0.79	0.81	0.91	0.38	0.56	0.41	0.66	0.80	0.49	0.90
R Square	0.63	0.66	0.83	0.15	0.31	0.17	0.44	0.63	0.24	0.57
									0.76	0.82
									0.67	0.80
									0.38	0.94
									0.14	0.88

Continued

Wage and Population = Market size (2002-2006)	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPACKIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE
Manufacturing: Other Non-Metal Goods																
Multiple R	0.86	0.10	0.76	0.30	0.29	0.62	0.90	0.45	0.55		0.55	0.51	0.82	0.42	0.91	0.77
R Square	0.75	0.01	0.58	0.09	0.09	0.38	0.81	0.20	0.30		0.31	0.26	0.68	0.18	0.83	0.59
Manufacturing: Pharmaceuticals																
Multiple R			0.83				0.72								0.84	
R Square			0.68				0.52								0.71	
Manufacturing: Pulp & Paper / Publishing & Printing																
Multiple R	0.98	0.94	0.88	0.97	0.82	0.98	0.83			1.00	0.91	0.96	0.15	0.76	0.87	0.94
R Square	0.95	0.89	0.77	0.93	0.68	0.96	0.69			1.00	0.83	0.91	0.02	0.58	0.76	0.88
Manufacturing: Radio, Television, Communication Equipment & Apparatus																
Multiple R			0.96				0.58								0.84	
R Square			0.91				0.34								0.71	
Manufacturing: Rubber & Plastics																
Multiple R	0.99	0.97	0.58	0.57	1.00	0.95	0.61		0.86	0.95	0.76	0.85		0.87	0.93	0.80
R Square	0.99	0.94	0.34	0.32	0.99	0.91	0.38		0.74	0.91	0.58	0.73		0.76	0.86	0.63

Manufacturing: Transport Equipment													
Multiple R	0.97	0.52	0.97	0.87	0.57	0.55	0.89	0.87	0.87	0.83	0.72	0.95	0.98
R Square	0.94	0.27	0.94	0.75	0.33	0.31	0.78	0.76	0.76	0.69	0.52	0.90	0.96
Manufacturing: Wood & Wooden Products													
Multiple R	0.90	0.45		0.94	0.26			0.78	0.91				0.81
R Square	0.82	0.20		0.87	0.07			0.61	0.82				0.66
Mining and quarrying													
Multiple R	1.00			0.91	0.98	0.72				0.92			
R Square	1.00			0.83	0.97	0.52				0.85			
Other community, social and personal service activities													
Multiple R	0.90	0.86		0.93	0.72					0.90	0.90		0.50
R Square	0.81	0.75		0.86	0.51					0.82	0.80		0.25
Real estate, rental and business activities													
Multiple R	0.92	0.90		0.96	0.80	0.85				0.89	0.95		0.34
R Square	0.85	0.81		0.93	0.64	0.73				0.79	0.90		0.12
Trade and repair													
Multiple R	0.86	0.60	0.43	0.96	1.00	0.80	0.95			0.89	0.98		0.90
R Square	0.75	0.36	0.19	0.91	1.00	0.81	0.64	0.91	0.73	0.79	0.95		0.81
Transport, storage and communication* (2004–2006)													
Multiple R	1.00												0.82
R Square	1.00												0.81

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIIZ) and the author's own analysis.

Appendix 3f Results of regression between RLAs and regional private amount of R&D spending (H3f).

Private R&D per Region & Industry (2000–2005)	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPACKIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE
Agriculture, hunting and forestry																
Multiple R	0.075										0.904			0.263	0.625	
R Square	0.006										0.816			0.069	0.391	
Mining and quarrying																
Multiple R	0.614					0.809	0.392	0.597				0.652				
R Square	0.377					0.654	0.153	0.357				0.424				
Manufacturing: Chemicals & Chemical Products																
Multiple R	0.485	0.424	0.498	0.261	0.700	0.487	0.549	0.635	0.457		0.056	0.144	0.383		0.267	0.782
R Square	0.235	0.180	0.248	0.068	0.490	0.237	0.302	0.403	0.209		0.003	0.021	0.146		0.071	0.612
Manufacturing: Consumer Products																
Multiple R	0.812		0.376				0.034								0.256	1.000
R Square	0.659		0.141				0.001								0.066	1.000
Manufacturing: Electrical Machinery and Apparatus																
Multiple R	0.164	1.000	0.423				0.161		0.351		0.715	0.357		0.634	0.383	
R Square	0.027	1.000	0.179				0.026		0.123		0.511	0.128		0.403	0.147	
Manufacturing: Fabrics & Textiles																
Multiple R	0.364	0.631	0.466		0.419	0.824	0.086	0.629		0.324		0.706	0.509	0.233	0.589	
R Square	0.132	0.398	0.217		0.176	0.679	0.007	0.396		0.105		0.498	0.259	0.054	0.347	

Manufacturing: Food, Drinks & Tobacco Products																
Multiple R	0.873	0.932	0.630	0.841	0.096	0.740	0.399	0.825	0.996	0.801	0.356	0.295	0.465	0.055	0.232	0.711
R Square	0.763	0.868	0.396	0.708	0.009	0.548	0.159	0.680	0.991	0.641	0.127	0.087	0.217	0.003	0.054	0.505
Manufacturing: Furniture & Consumer Goods																
Multiple R	0.553	0.450		0.816			0.538				0.482	0.758		0.209	0.305	0.080
R Square	0.306	0.202		0.666			0.289				0.232	0.575		0.044	0.093	0.006
Manufacturing: Glass																
Multiple R									0.045							
R Square									0.002							
Manufacturing: Leather & Leather Products																
Multiple R	0.300	0.163		0.303			0.021		0.310							0.907
R Square	0.090	0.027		0.092			0.000		0.096							0.823
Manufacturing: Machinery & Equipment																
Multiple R	0.791		0.132	0.031			0.717	0.206			0.316	0.916	1.000	0.836	0.930	
R Square	0.626		0.017	0.001			0.515	0.042			0.100	0.839	1.000	0.700	0.865	
Manufacturing: Metals & Metal Products																
Multiple R	0.047	0.047	0.888	0.612	0.029	0.734	0.472	0.468	0.631	0.882	0.407	0.717	0.452		0.393	0.969
R Square	0.002	0.002	0.789	0.375	0.001	0.539	0.222	0.219	0.398	0.778	0.166	0.514	0.204		0.154	0.938
Manufacturing: Other Non-Metal Goods																
Multiple R	0.289	0.741	0.063	0.143	0.639	0.598	0.165	0.831	0.310		0.154	0.583	0.225	0.572	0.513	0.557
R Square	0.084	0.549	0.004	0.020	0.408	0.358	0.027	0.690	0.096		0.024	0.340	0.050	0.327	0.264	0.310
Manufacturing: Pharmaceuticals																
Multiple R				0.652			0.859									0.842
R Square				0.425			0.737									0.709

Continued

Private R&D per Region & Industry (2000-2005)	DOLNOŚLĄSKIE	KUJAWSKO-POMORSKIE	ŁÓDZKIE	LUBELSKIE	LUBUSKIE	MAŁOPOLSKIE	MAZOWIECKIE	OPOLSKIE	PODKARPACIE	PODLASKIE	POMORSKIE	ŚLĄSKIE	ŚWIĘTOKRZYSKIE	WARMIŃSKO-MAZURSKIE	WIELKOPOLSKIE	ZACHODNIOPOMORSKIE
Manufacturing: Pulp & Paper / Publishing & Printing																
Multiple R	0.212	0.216	0.254	0.942	0.966	0.560	0.221			0.380	0.441	0.279	0.305	0.284	0.136	0.725
R Square	0.045	0.047	0.064	0.888	0.934	0.314	0.049			0.145	0.194	0.078	0.093	0.081	0.018	0.526
Manufacturing: Radio, Television, Communication Equipment & Apparatus																
Multiple R	1.000						0.329								0.606	
R Square	1.000						0.108								0.367	
Manufacturing: Rubber & Plastics																
Multiple R	0.147	0.601	0.096	0.147	0.229	0.866	0.335		0.243	0.757	0.125	0.078		0.388	0.391	0.907
R Square	0.022	0.361	0.009	0.022	0.052	0.751	0.113		0.059	0.573	0.016	0.006		0.150	0.153	0.823
Manufacturing: Transport Equipment																
Multiple R	0.438	0.174	0.425	0.029	0.482	0.156	0.432	0.009	0.130		0.302	0.054	0.749		0.809	
R Square	0.192	0.030	0.181	0.001	0.232	0.024	0.187	0.000	0.017		0.091	0.003	0.560		0.655	
Manufacturing: Wood & Wooden Products																
Multiple R	0.307	0.304		0.801	0.394				0.676	0.268					0.578	0.101
R Square	0.094	0.092		0.641	0.155				0.457	0.072					0.334	0.010

Electricity, gas and water supply																	
Multiple R	0.567									0.280	0.055	0.728	0.566	0.737	0.327	0.171	0.194
R Square	0.321									0.078	0.003	0.530	0.320	0.543	0.107	0.029	0.038
Construction																	
Multiple R		0.848										0.611	0.313	0.501		0.912	
R Square		0.720										0.373	0.098	0.251		0.832	
Trade and repair																	
Multiple R	0.000	0.911	0.307	0.547	0.361	0.664	0.102			0.441		0.308	0.676		0.494	0.907	
R Square	0.000	0.829	0.094	0.299	0.130	0.905	0.441	0.010		0.194		0.095	0.457		0.244	0.823	
Hotels and restaurants																	
Multiple R	0.401			0.253	0.414		0.499					0.553	0.135		0.559	0.889	
R Square	0.161			0.064	0.171		0.249					0.306	0.018		0.313	0.790	
Transport, storage and communication* (2004–2006)																	
Multiple R	1.000	1.000		1.000	1.000		1.000			1.000		1.000	1.000		1.000	1.000	1.000
R Square	1.000	1.000		1.000	1.000		1.000			1.000		1.000	1.000		1.000	1.000	1.000
Financial intermediation																	
Multiple R	0.094	0.537	0.656		0.196		0.466					0.301	0.083		0.164		
R Square	0.009	0.289	0.430		0.039		0.217					0.091	0.007		0.027		
Real estate, rental and business activities																	
Multiple R	0.561		0.958			0.408	0.220	0.528				0.435	0.048		0.389	0.309	
R Square	0.315		0.917			0.166	0.049	0.279				0.190	0.002		0.151	0.095	
Other community, social and personal service activities																	
Multiple R	0.018		0.066			0.693	0.692					0.090	0.652		0.386	0.874	
R Square	0.000		0.004			0.481	0.478					0.008	0.425		0.149	0.764	

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIIZ) and the author's own analysis.

Appendix 4 H4a Fortune 500 2000 and 2006

Investor name	Fortune 500 - 2000	Fortune 500 - 2006	Fortune 500 - 2006 & 2006	Location		Powiat	Wojewodztwo	Country of registration	Country-of-origin	Activities (PKD)	Activities (class)	Comments
	0	1	0	increase since 2000	present since at least 2000							
Autoliv AB	0	1	0	Olawa	Olawski	Dolnośląskie	Sweden	Sweden	Sweden	Manufacture of parts and accessories for motor vehicles and their engines;	Manufacture of parts and accessories for motor vehicles and their engines;	Autoliv Polska Sp. z o. o. - Olawa, Jelcz
General Mills	1	0	0	Torun	Torun	Kujawsko-Pomorskie	USA	USA	USA	food processing	Manufacture of electrical machinery and apparatus;	stake in Toruń-Pacific Sp. z o. o. (Toruń)
Lucent Technologies Network Systems Netherlands BV	0	1	1	Bydgoszcz	Bydgoszcz	Kujawsko-Pomorskie	The Netherlands	USA	USA	Manufacture of electrical machinery and apparatus;	Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy;	Lucent Technologies Poland Sp. z o. o. - Warsaw and Bydgoszcz
Harris	1	0	0	Lodz	Lodzki	Łódzkie	Austria	Austria	Austria	retail trade		Domar S.A. (Łódź)

PepsiCo	1	1	1	1	Łódź	Lodz	Łódzkie	USA	USA	Manufacture of food, drinks and tobacco products;	Manufacture of beverages;	PepsiCo General Bottlers Poland Sp. z o. o. – Bottling plants in Łódź, Białystok, Gdańsk, Kraków, Poznań, Szczecin, Wrocław, Zyrardow and Pniowy. Salted snacks factory in Grodzisk Mazowiecki. Sale of "Delicja" confectionery to Danone
Caterpillar Inc.	1	1	1	1	Janów Lubelski	Janowski	Lubelskie	USA	USA	Manufacture of transport equipment;	Manufacture of parts and accessories for motor vehicles and their engines;	Caterpillar Poland Sp. z o. o. – Janów Lubelski
Sara Lee D/E N.V.	0	1	0	0	Gorzów Wielkopolski	Gorzów Wielkopolski	Lubuskie	The Netherlands	The Netherlands	Manufacture of leather and leather products;	Manufacture of footwear;	Bama Polska Sp. z o. o. – Gorzów Wielkopolski
Ballinger Holdings Ltd.	0	1	0	0	Warsaw	Warsaw	Mazowieckie	Cyprus	Cyprus	Financial intermediation;	Financial intermediation, except insurance and pension funding;	50% stake in Ballinger Capital Sp. z o. o.
PARKER HANNIFIN GmbH	0	1	0	0	Warsaw	Warsaw	Mazowieckie	Germany	Germany	Manufacture of machinery and equipment;	Manufacture of other general purpose machinery;	Parker Hannifin Sp. z o. o. – Warsaw, Wrocław, Świebodzice
Readymix Group	1	0	0	0	Ostroleka	Ostroleka	Mazowieckie	International	International	other non-metal goods	other non-metal goods	Ytong Ostroleka Sp. z o. o., cement aggregates plant in Szczecin, plant in Ostroleka

Continued

Appendix 4 H4a Continued

Investor name	Fortune 500 - 2000	Fortune 500 - 2006	Fortune 500 + 2006 & 2006 - 2006	Location	Powiat	Wojewodztwo	Country of registration	Country-of-origin	Activities (PKD)	Activities (class)	Comments
			increase since 2000	present since at least 2000							
Lucent Technologies Network Systems Netherlands BV	1	0	0	Warsaw	Warsaw	Mazowieckie	The Netherlands	The Netherlands	electrical machinery and apparatus		Lucent Technologies Poland S.A. (Warsaw and Bydgoszcz) – production of equipment for telecommunications
3M Nederland B.V.	1	1	1	Warsaw	Warsaw	Mazowieckie	The Netherlands	The Netherlands	Manufacture of chemicals and chemical products; wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods;	Manufacture of pharmaceuticals, medicinal chemicals and botanical products; other wholesale;	3M Poland Sp. z o. o. – Kajetany near Warsaw; 3M Poland Sp. z o. o. – Wroclaw
Levi Strauss	0	1	0	Plock	Plock	Mazowieckie	The Netherlands	The Netherlands	Manufacture of fabrics and textiles;	Manufacture of other wearing apparel and accessories;	Levi Strauss Poland Sp. z o. o. – Office in Warsaw; Factory in Plock
Eli Lilly Nederland	0	1	0	Warsaw	Warsaw	Mazowieckie	The Netherlands	The Netherlands	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods;	Wholesale of household goods;	Eli Lilly Polska Sp. z o. o. – Warsaw

Merrill Lynch Investment Ltd.	1	0	0	Warsaw	Warsaw	Mazowieckie	United Kingdom	capital investment	stake in Mostostal Export (Warsaw)
Xerox Ltd.	1	1	1	Warsaw	Warsaw	Mazowieckie	United Kingdom	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; automotive	Xerox Polska Sp. z o. o. – Warsaw
Ford	1	0	0	Plonsk	Plonski	Mazowieckie	USA		Ford Poland S.A. – car assembly plant (Plonsk), Purchasing Center Europe (Warsaw)
J.P. Morgan	1	0	0	Warsaw	Warsaw	Mazowieckie	USA	banking	J.P. Morgan Polska Sp. z o. o., shares in Bank Handlowy w Warszawie S.A.
GTECH Corporation	1	0	0	Warsaw	Warsaw	Mazowieckie	USA	business activities	Grytek Sp. z o. o. (Warsaw)
Gillette	1	0	0	Warsaw	Warsaw	Mazowieckie	USA	consumer products	Bank Handlowy w Warszawie S.A. Grytek Sp. z o. o. (Warsaw) Gillette Poland S.A. (Warsaw), Wizamet S.A. Lodz – razor production, distribution of toiletries
Cigna Global Holdings Inc	1	1	1	Warsaw	Warsaw	Mazowieckie	USA	Financial intermediation;	Towarzystwo Ubezpieczeń i Reasekuracji Cigna Stu S.A., Cigna Stu Życie
Nationwide Global Holdings Inc	0	1	0	Warsaw	Warsaw	Mazowieckie	USA	Financial intermediation;	Nationwide Towarzystwo Ubezpieczeń na Życie
								Insurance and pension funding, except compulsory social security; Insurance and pension funding, except compulsory social security;	Towarzystwo Ubezpieczeń na Życie S.A. – Warsaw

Continued

Appendix 4 H4a Continued

Investor name	Fortune 500 - 2000	Fortune 500 - 2006	Fortune 500 - present since at least 2000	Wojewodztwo			Country of registration	Country-of-origin	Activities (PKD)	Activities (class)	Comments
				Location	Powiat	Mazowieckie					
Citigroup	0	1	0	Warsaw	Warsaw	Mazowieckie	USA	USA	Financial intermediation;	Monetary intermediation; other financial intermediation;	Citibank Handlowy S.A. – Warsaw
General Electric Corporation (GE)	1	1	1	Warsaw	Warsaw	Mazowieckie	USA	USA	Financial intermediation; manufacture of electrical machinery and apparatus;	Monetary intermediation; manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment;	Representative Office in Poland – Representative Office in Poland – Warsaw, GE Capital Bank – Gdańsk, GE Bank Mieszkaniowy – Warsaw, GE Power Controls – factories in Bielsko – Biala, Kłodzko, Łódź, GE Medical Systems Polska Sp. z o. o. – Warsaw, GE Airera AmRest Sp. z o. o., American Retail Systems Sp. z o. o. – 14 Pizza Hut, KFC and Taco Bell restaurants (Warsaw, Wrocław, Poznań, Szczecin, Leszno, Jelenia Góra, Gorzów Wielkopolski and Gniezno)
AmRest Holding BV	1	0	0	Warsaw	Warsaw	Mazowieckie		USA	hotels and restaurants, property management		

Colgate-Palmolive America INC	1	1	1	Halinów	Warsaw	Mazowieckie	USA	USA	Manufacture of chemicals and chemical products;	Manufacture of soap and detergents; cleaning and polishing preparations, perfumes and toilet preparations;	55% stake in Colgate – Palmolive Poland Sp. z o. o. – Office in Halinów near Warsaw
Praxair Inc.	1	1	1	Warsaw	Warsaw	Mazowieckie	USA	USA	Manufacture of chemicals and chemical products;	Manufacture of basic chemicals;	Praxair Polska Sp. z o. o. – Plants in Warsaw, Gliwice, Poznań, Siewierz and Wrocław
Procter & Gamble Mexico Holding	1	1	1	Warsaw	Warsaw	Mazowieckie	The Netherlands	USA	Manufacture of chemical products; pulp and paper, publishing and printing;	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations; manufacture of articles of paper and paperboard;	Procter & Gamble Operations Polska Sp. z o. o.
Motorola Inc.	1	1	1	Warsaw	Warsaw	Mazowieckie	USA	USA	Manufacture of electrical machinery and apparatus;	Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy;	Motorola Polska Sp. z o. o. – Warsaw, Motorola Polska Electronics Sp. z o. o. – Kraków, Motorola Polska Software Center in Kraków

Continued

Appendix 4 H4a Continued

Investor name	Fortune 500 - 2006		Fortune 500 - 2006		Location	Powiat	Wojewodztwo	Country of registration	Country-of-origin	Activities (PKD)	Activities (class)	Comments
	1	1	1	1								
Smithfield Foods	1	1	1	1	Warsaw	Warsaw	Mazowieckie	USA	USA	Manufacture of food, Production, drinks and tobacco products;	processing and preserving of meat and meat products;	Animex - Krakowskie Zaklady Pierzarskie Sp. z o.o. - Kraków; ANIMEX Grupa Drobiarska Sp. z o.o. - Suwalki, Animex Sp. z o.o. - Warszawa; Animex-Pasze Sp. z o.o. - Zamość; Contipasz S.A. - Grodków; Grupa Animex S.A. - Ostróda, Ilawskie Zaklady Drobiarskie E
Whirlpool Europe Srl	0	1	0	0	Warsaw	Warsaw	Mazowieckie	Italy	USA	Manufacture of machinery and equipment;	Manufacture of domestic appliances n.e.c.;	Whirlpool Polska Sp. z o.o. - Warsaw Polar S.A. - Wrocław
Delphi Automotive Systems	0	1	0	0	Blonie	Warszawski Zachodni	Mazowieckie	USA	USA	Manufacture of transport equipment;	of parts and accessories for motor vehicles and their engines;	Delphi Poland S.A. - Office in Kraków; Factories in Blonie, Ostrów Wielkopolski, Jeleśnia, Gdansk, Krosno, Delphi Polska Automotive Systems Poland Sp. z o.o. - factory in Tychy, R&D - Center in Kraków

Apache Corporation	0	1	0	Warsaw	Warsaw	Mazowieckie	USA	USA	Mining and quarrying;	Extraction of crude petroleum and natural gas;	Apache Poland Sp. z o.o. – Warsaw
Oracle Corporation	1	1	1	Warsaw	Warsaw	Mazowieckie	USA	USA	Real estate, rental and business activities;	Software consultancy and supply; Database activities;	Oracle Polska Sp. z o.o. – Warsaw
United Parcel Service Inc. (UPS)	0	1	0	Warsaw	Warsaw	Mazowieckie	USA	USA	Transport, storage and communication;	Post and courier activities;	UPS Polska Sp. z o.o. – Warsaw
Unisys Corporation	1	1	1	Warsaw	Warsaw	Mazowieckie	USA	USA	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods;	Other retail sale of new goods in specialized stores;	Unisys Polska Sp. z o.o. – Warsaw
Visteon Automotive Systems	0	1	0	Praszka	Oleski	Opolskie	USA	USA	Manufacture of transport equipment;	Manufacture of parts and accessories for motor vehicles and their engines;	Visteon Poland S.A. – Praszka, Polmot ZEM – Duszniki
United Technologies Automotive	1	1	1	Mielec	Mielecki	Podkarpackie	USA	USA	electrical machinery and apparatus		UT Automotive Poland Sp. z o.o. (EURO-PARK Mielec SEZ) – cable and wiring manufacturer
Owens-Illinois Inc.	1	1	1	Jaroslaw	Jaroslowski	Podkarpackie	USA	USA	Manufacture of other non-metal goods;	Manufacture of glass and glass products;	Owens – Illinois Polska S.A., Huta Szkła – Activity in Jaroslaw (Podkarpackie Voivodship), Huta Szkła Antoninek – Poznan

Continued

Appendix 4 H4a Continued

Investor name	Fortune 500 - 2000		Fortune 500 - 2006		Location	Powiat	Wojewodztwo		Country of registration	Country-of-origin	Activities (PKD)	Activities (class)	Comments
	increase since 2000	Fortune 500	present since at least 2000	Fortune 500 - 2006									
Goodrich Aerospace Canada LTD Lear Corporation	0	1	0	1	Krosno	Krosno	Podkarpackie	Canada	USA	USA	Manufacture of transport aircraft and spacecraft; Manufacture of parts and accessories for motor vehicles and their engines;	Manufacture of aircraft and spacecraft; Manufacture of parts and accessories for motor vehicles and their engines;	Goodrich Krosno Sp. z o. o. - Krosno Lear Automotive (EEDS) Poland Sp. z o. o. - Mielec Lear Corporation Poland Sp. z o. o. - Tychy, Gliwice, Warsaw Elektrotechnologia Nowa Sarzyna Sp. z o. o. - combined heat plant
Enron International	1	0	0	0	Nowa Sarzyna	Lezajsk	Podkarpackie		USA		power, gas and water supply		98% stake in Eaton Truck Components S.A. - Activity in Tczew Eaton Automotive Systems Sp. z o. o. - Bielsko-Biala
Eaton	0	1	0	0	Tczew	Tczewski	Pomorskie	USA	USA	USA	Manufacture of transport equipment;	Manufacture of parts and accessories for motor vehicles and their engines;	
Intel Europe Inc.		1			Gdańsk	Gdańsk	Pomorskie	USA	USA	USA	Real estate, rental and business activities; metal products	Computer and related activities;	Intel Technology Poland Sp. z o. o. - Gdańsk
Foster Wheeler Energy	1	0	0	0	Sosnowiec	Sosnowiec	Śląskie		Finland				Foster Wheeler Energy Fakop Sp. z o. o. (Sosnowiec)

TRW	1	0	0	Czechowice-Dziedzice	Bielski	Śląskie	USA	Manufacture of transport equipment;	TRW Steering Systems Poland Sp. z o. o. – car components production
Timken Company	0	1	0	Sosnowiec	Sosnowiec	Śląskie	USA	Manufacture of machinery and equipment;	Timken Polska Sp. z o. o. – Sosnowiec
General Motors Corporation	1	1	1	Gliwice	Gliwice	Śląskie	USA	Manufacture of transport equipment;	General Motors Manufacturing Poland Sp. z o. o. – car production in Gliwice, General Motors Poland Sp. z o. o. – Office in Warsaw, GMAC Sp. z o. o. – Office in Warsaw, Isuzu Motors Polska Sp. z o. o.
Tenneco Global Holding Inc	0	1	0	Rybnik	Rybnik	Śląskie	USA	Manufacture of transport equipment;	Tenneco Automotive Polska Sp. z o. o. – Office in Warsaw, Factories in Rybnik and Gliwice
Aesculap AG	1	1	1	Nowy Tomysł	Tomyski	Wielkopolskie	Germany	Manufacture of electrical machinery and apparatus;	98.73% stake in Aesculap Chifa Sp. z o. o. – Nowy Tomysł (Wielkopolskie Voivodship)

Continued

Appendix 4 H4a Continued

Investor name	Fortune 500 - 2000	Fortune 500 - 2006	Fortune 500 - 2006 & 2006 - 2000	increase since 2000	present since at least 2000	Location	Powiat	Wojewodztwo	Country of registration	Country-of-origin	Activities (PKD)	Activities (class)	Comments
Dana Corporation	1	0	0	0	0	Gostyn	Gostynski	Wielkopolskie	USA	USA	Manufacture of transport equipment;	Manufacture of transport equipment;	WIX-FILTRON Sp. z o. o. (Gostyn) - car components production
H.J. Heinz Company	0	1	0	0	0	Pudliszki	Gostynski	Wielkopolskie	USA	USA	Manufacture of food, drinks and tobacco products;	Processing and preserving of fruit and vegetables;	H.J. Heinz Polska S.A. - Pudliszki
Wm. Wrigley Jr. Company	0	1	0	0	0	Poznan	Poznan	Wielkopolskie	USA	USA	Manufacture of food, drinks and tobacco products;	Manufacture of other food products;	99,96% stake in Wrigley Poland Sp. z o. o. - Office in Poznan
ArvinMeritor	0	1	0	0	0	Swarzecz	Poznanski	Wielkopolskie	USA	USA	Manufacture of transport equipment;	Manufacture of parts and accessories for motor vehicles and their engines;	ArvinMeritor Sp. z o. o. - Swarzedz

Conoco Central Europe Inc	1	0	0	chain	USA	distribution of petroleum products, retail trade	Conoco Poland Sp. z o.o. - gas station network
US West	1	0	0	chain	USA	telecommunications	22.5% of shares of Polska Telefonia Cyfrowa – GSM system operator
Total	34	40	19				
Increase since year 2000		18%					
Present in both year 2000 & 2006			48%				

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIIZ) and the author's own analysis.

Appendix 4 H4b Fortune 500 firms in Mazowieckie

Investor name	Fortune 500 – 2000	Fortune 500 – 2006	Fortune 500 – 2006 & 2000	% change of the 2000 RLAic	change of the 2000 RLAic	change in the presence of F500 firms	Location	Wojewodztwo	Country of origin	Activities (PKD)
GTECH Corporation	1	0	0	0	-	-	Warsaw	Mazowieckie	USA	Capital investment/ business activities
Merrill Lynch Investment Ltd.	1	0	0	0	-	-	Warsaw	Mazowieckie	United Kingdom	Capital investment
Ballinger Holdings Ltd.	0	1	0	0.48	-	+	Warsaw	Mazowieckie	Cyprus	Financial intermediation;
Cigna Global Holdings Inc	1	1	1	0.48	-	=	Warsaw	Mazowieckie	USA	Financial intermediation;
Nationwide Global Holdings Inc	0	1	0	0.48	-	+	Warsaw	Mazowieckie	USA	Financial intermediation;
J.P. Morgan	1	0	0	0.48	-	-	Warsaw	Mazowieckie	USA	Financial intermediation;
Citigroup	0	1	0	0.48	-	+	Warsaw	Mazowieckie	USA	Financial intermediation;
General Electric Corporation (GE)	1	1	1	0.48	-	=	Warsaw	Mazowieckie	USA	Financial intermediation;
AmRest Holding BV	1	0	0	1.04	+	-	Warsaw	Mazowieckie	USA	manufacture of electrical machinery and apparatus; Hotels and restaurants, property management

Praxair Inc.	1	1	1	1	0.73	-	=	Warsaw	Mazowieckie	USA	Manufacture of chemicals and chemical products;
Colgate-Palmolive America INC	1	1	1	1	0.73	-	=	Halinów	Mazowieckie	USA	Manufacture of chemicals and chemical products;
Procter & Gamble Mexico Holding	1	1	1	1	0.73	-	=	Warsaw	Mazowieckie	USA	Manufacture of chemicals and chemical products; manufacture of pulp and paper, publishing and printing;
3M Nederland B.V.	1	1	1	1	0.73	-	=	Warsaw	Mazowieckie	The Netherlands	Manufacture of chemicals and chemical products; wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods;
Gillette	1	0	0	0	0.00	-	-	Warsaw	Mazowieckie	USA	Manufacture of consumer products
Lucent Technologies Network Systems Netherlands BV	1	0	0	0	0.67	-	-	warsaw	Mazowieckie	The Netherlands	Manufacture of electrical machinery and apparatus

Continued

Appendix 4 H4b Continued

Investor name	Fortune 500 - 2000	Fortune 500 - 2006	Fortune 500 - 2006 & 2000	% change of the 2000 RL/Aic	change of the 2000 RL/Aic	change in the presence of F500 firms	Location	Wojewodztwo	Country of origin	Activities (PKD)
	1	1	1	0.67	-	=	Warsaw	Mazowieckie	USA	Manufacture of electrical machinery and apparatus;
Levi Strauss	0	1	0	0.37	-	+	Plock	Mazowieckie	The Netherlands	Manufacture of fabrics and textiles;
Smithfield Foods	1	1	1	0.76	-	=	Warsaw	Mazowieckie	USA	Manufacture of food, drinks and tobacco products;
Whirlpool Europe Srl	0	1	0	0.64	-	+	Warsaw	Mazowieckie	USA	Manufacture of machinery and equipment;
PARKER HANNIFIN GmbH	0	1	0	0.64	-	+	Warsaw	Mazowieckie	Germany	Manufacture of machinery and equipment;
Readymix Group	1	0	0	0.56	-	-	Ostroleka	Mazowieckie	International	Manufacture of other non-metal goods
Delphi Automotive Systems	0	1	0	1.91	+	+	Blonie	Mazowieckie	USA	Manufacture of transport equipment;
Ford	1	0	0	1.91	+	-	Plonsk	Mazowieckie	USA	Manufacture of transport equipment;
Apache Corporation	0	1	0	0.64	-	+	Warsaw	Mazowieckie	USA	Mining and quarrying;

Oracle Corporation	1	1	1	1.39	+	=	Warsaw	Mazowieckie	USA	Real estate, renting and business activities;
United Parcel Service Inc. (UPS)	0	1	0	1.07	+	+	Warsaw	Mazowieckie	USA	Transport, storage and communication;
Xerox Ltd.	1	1	1	0.87	-	=	Warsaw	Mazowieckie	United Kingdom	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods;
Unisys Corporation	1	1	1	0.87	-	=	Warsaw	Mazowieckie	USA	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods;
Eli Lilly Nederland	0	1	0	0.87	-	+	Warsaw	Mazowieckie	The Netherlands	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods;
Total increase since year 2000	19	21	11							
present in both year 2000 & 2006		11%	52%							

Source: Based on data obtained from the Polish Information and Foreign Investment Agency (PAIIZ) and the author's own analysis.

Appendix 4a Fortune 500 firms and other leading foreign firms in Poland

		Large firms entered in years 2007 and 2008					
Investor name	Fortune 500-until year 2006*	Location	Wojewodztwo	Country-of-origin	Activities(PKD)	Activities	
Dolnośląskie							
Nokia-Siemens	1	Wroclaw	Dolnośląskie	Finland	Telecommunications	R&D	
Copengemini	1	Wroclaw	Dolnośląskie	France	Services-Business services	R&D	
Siemens	1	Wroclaw	Dolnośląskie	Germany	Manufacture of electrical machinery	R&D	
KPIT	1	Wroclaw	Dolnośląskie	India	Services-Business services	IT	
Wipro technologies		Wroclaw	Dolnośląskie	India	Services-Business services	IT	
Autoliv AB	0	Olawa	Dolnośląskie	Sweden	Manufacture of transport parts	Manufacture of	
HP	1	Wroclaw	Dolnośląskie	USA	Services-Business services	R&D	
Remy International	1	Wroclaw	Dolnośląskie	USA	Manufacture of transport	R&D	
CSS	1	Wroclaw	Dolnośląskie	USA	Services-Business services	IT	
Google	1	Wroclaw	Dolnośląskie	USA	Services-Business services	IT	
Increase	9						
	900%						

Łódzkie

Harris	0	Lodz	Łódzkie	Austria	Wholesale and retail trade	
Bosch-Siemens	1	Lodz	Łódzkie	Germany	Manufacture of transport	R&D
Atos Origin	1	Lodz	Łódzkie	Netherlands	Services-Business services	IT
PepsiCo	1	Lodz	Łódzkie	USA	Manufacture of food and drinks	
Manufacture of beverages;	2					
Increase	100%					
Lubuskie						

Sara Lee D/E	0	Gorzów Wielkopolo	Lubuskie	The Netherlands	Manufacture of leather
Manufacture of foot wear					
N.V	1	Zielona Gora	Lubuskie	Philippines	Manufacture of electrical machinery
	1				R&D
Increase	100%				
* Firms annotated with 0 entered Poland after year 2000 and before 2006					
Małopolskie					
Pliva	1	Krakow	Małopolskie	Croatia	Power, gas, and water supply
Lurgi	1	Krakow	Małopolskie	Germany	Power, gas, and water supply
Fatro SpA	1	Krakow	Małopolskie	Italy	Manufacture of pharmaceuticals
HSL	1	Krakow	Małopolskie	Netherlands	Services-Business services
ABB	1	Krakow	Małopolskie	Switzerland	Manufacture of electrical machinery
IBM	1	Krakow	Małopolskie	USA	Services-Business services
Sabre	1	Krakow	Małopolskie	USA	Services-Business services-travel
CH2M Hill	1	Krakow	Małopolskie	USA	Power, gas, and water supply
	0				
Increase	8				
Mazowieckie					
Balinger Holdings Ltd	0	Warsaw	Mazowieckie	Cyprus	Financial intermediation
TopGan	1	Warsaw	Mazowieckie	France	Nanotechnology
					Financial Intermediation R&D

Continued

Appendix 4a Continued

Investor name	Fortune 500-untill year 2006*	Large firms entered in years 2007 and 2008		Location	Wojewodztwo	Country-of-origin	Activities(PKD)	Activities
Bayer AG		1		Warsaw	Mazowieckie	Germany	Manufacture of chemicals	
Biotech/pharma PARKER HANNIFIN	0			Warsaw	Mazowieckie	Germany	Manufacture of machinery	Manufacture of
Hexal AG		1		Warsaw	Mazowieckie	Germany	Pharmaceuticals	Biotech/pharma
Egis Pharmaceutical		1		Warsaw	Mazowieckie	Hungary	Manufacture of Pharmaceuticals	Biotech/pharma
Readymix Group	0			Warsaw	Mazowieckie	International	Manufacture of other non-metal	
LG Electronic		1		Clechanow	Mazowieckie	So. Korea	Manufacture of electrical machinery	R&D
Samsung Electronic		1		Warsaw	Mazowieckie	So. Korea	Telecommunications	R&D
Cederrath		1		Radzynin	Mazowieckie	Sweden	Manufacture of chemicals	R&D
Lucent technologies		0		Warsaw	Mazowieckie	The Netherlands	Manufacture of electrical machinery	
3M Netherland B.V		1		Warsaw	Mazowieckie	The Netherlands	Manufacture of chemicals	Manufacture of
*-Firms annotated with 0 entered Poland after year 2000 and before 2006								
Levi Strauss	0			Plock	Mazowieckie	The Netherlands	Manufacture of fabrics and textiles	Manufacture of
Boxter Healthcare		1		Warsaw	Mazowieckie	The Netherlands	Manufacture of Pharmaceuticals	Biotech/pharma
Eli Lilly Netherland	0			Warsaw	Mazowieckie	The Netherlands	Wholesale and retail trade; repair	Wholesale of household

Glaxo smithkline	1	Warsaw	Mazowieckie	United Kingdom	Manufacture of Pharmaceuticals Financial intermediation;	Biotech/pharma
Merrill Lynch Investment Ltd	0	Warsaw	Mazowieckie	United Kingdom	Wholesale and retail trade; repair	Other retail sale of new
Xerox Ltd	1	Warsaw	Mazowieckie	United Kingdom	Automotive	
Ford	0	Plonsk	Mazowieckie	USA	Financial intermediation	
J.P. Morgan	0	Warsaw	Mazowieckie	USA	Manufacture of consumer products	
Gillette	0	Warsaw	Mazowieckie	USA	Financial intermediation	Insurance and pension
Cigna Global Holdings Inc	1	Warsaw	Mazowieckie	USA	Financial intermediation	Insurance and pension
Nationwide Global Holdings	0	Warsaw	Mazowieckie	USA	Financial intermediation	pension
Citigroup	0	Warsaw	Mazowieckie	USA	Financial intermediation	Monetary Intermediation
General Electric Corporation	1	Warsaw	Mazowieckie	USA	Financial intermediation	Monetary Intermediation
AmRest Holding BV	0	Garwoli	Mazowieckie	USA	Hotels and restaurants	
Avon	1	Garwoli	Mazowieckie	USA	Manufacture of chemicals	R&D
Colgate-Palmolive	1	Halinów	Mazowieckie	USA	Manufacture of chemicals	Manufacture of soap
Praxair Inc	1	Warsaw	Mazowieckie	USA	Manufacture of chemicals	Manufacture of basic
Procter &Gamble Mexico	1	Warsaw	Mazowieckie	USA	Manufacture of chemicals	Manufacture of soap
Motorola Inc	1	Warsaw	Mazowieckie	USA	Manufacture of electrical machinery	Manufacture of television
Smith field Foods	0	Warsaw	Mazowieckie	USA	Manufacture of food and drinks	Production, Processing

Continued

Appendix 4a Continued

Investor name	Fortune 500-until year 2006*	Large firms entered in years 2007 and 2008	Location	Wojewodztwo	Country-of-origin	Activities(PKD)	Activities
Whirlpool Europe Srl		1	Warsaw	Mazowieckie	USA	Manufacture of machinery	Manufacture
IVAX Corporation	0		Warsaw	Mazowieckie	USA	Manufacture of Pharmaceuticals	Biotech/pharma
Delphi Automotive	0		Blonie	Mazowieckie	USA	Manufacture of transport equipment	Manufacture of Parts
Apache Corporation	0		Warsaw	Mazowieckie	USA	Mining and quarrying	Extraction of crude
Oracle Corporation	1		Warsaw	Mazowieckie	USA	Real estate, renting, and business	Software consultancy
GTECH corporation	0		Warsaw	Mazowieckie	USA	Service -Business services	R&D
Microsoft		1	Warsaw	Mazowieckie	USA	Service -Business services	R&D
SAS Institutes		1	Warsaw	Mazowieckie	USA	Service -Business services	R&D
vantyx systems		1	Warsaw	Mazowieckie	USA	Service -Business services	IT
United Parcel Service Inc	0		Warsaw	Mazowieckie	USA	Transport, storage and communication	Post and courier
Unisys Corporation	1		Warsaw	Mazowieckie	USA	Wholesale and retail trade; repair	Other retail sale
	29	15					
	Increase	52%					

Podkarpackie

East Springs International NV		1	Iwonicz Zdrój	Podkarpackie	France	Manufacture of chemicals	
-------------------------------	--	---	---------------	--------------	--------	--------------------------	--

*-Firms annotated with 0 entered Poland after year 2000 and before 2006

United Technologies	1	Mielec	Podkarpackie	USA	Electrical machinery and apparatus
Owens-Illinois Inc	1	Jarosla	Podkarpackie	USA	Manufacture of other non-metal
Goodrich Aerospace	0	Krosno	Podkarpackie	USA	Manufacture of transport equipment
Lear Corporation	1	Mielec	Podkarpackie	USA	Manufacture of transport equipment
Pratt&Whitney	1	Rzeszow	Podkarpackie	USA	Manufacture of transport equipment
Enron International	0	Nowa Sarzyna	Podkarpackie	USA	Power, gas and water supply
	5				
Increase	2				
	40%				

Pomorskie

Alstom	1	Elblag	Pomorskie	France	Power, gas and water supply
ZenSar Technology	1	Gdansk	Pomorskie	India	Service-Business services
Compuware	1	Gdansk	Pomorskie	USA	Manufacture of electrical machinery
Eaton	0	Tczew	Pomorskie	USA	Manufacture of transport equipment
Intel Europe Inc		Gdansk	Pomorskie	USA	Real estate, renting, and business
Gelnterlogix	1	Gdansk	Pomorskie	USA	Service-Business services
*-Firms annotated with 0 entered Poland after year 2000 and before 2006					

Continued

Appendix 4a Continued

Investor name	Fortune 500-untill year 2006*	Large firms entered in years 2007 and 2008		Location	Wojewodztwo	Country-of-origin	Activities(PKD)	Activities
		1	2					
First Data Corporation	2	1	5	Gdansk	Pomorskie	USA	Service-Business services	IT
	Increase		250%					

Śląskie

Bombardier	0	1		Katowice	Śląskie	Canada	Manufacture of transport equipment	R&D
Foster Wheeler Energy	0			Sosnowiec	Śląskie	Finland	Manufacture of metal products	
Ontrack	0	1		Katowice	Śląskie	Netherlands	Services-Business services	R&D
Timken Company	0			Sosnowiec	Śląskie	USA	Manufacture of machinery	Manufacture of machinery
TRW	0			Czechowice	Śląskie	USA	Manufacture of transport equipment	
General Motors corporation	1			Gliwice	Śląskie	USA	Manufacture of transport equipment	Manufacture of motor
Tenneco Global Holding Inc	0			Rybnik	Śląskie	USA	Manufacture of transport equipment	Manufacture of parts
TRW Automotive		1		Czestochowa	Śląskie	USA	Manufacture of transport equipment	R&D
Emtex Pitney Bowes		1		Bielsko Biala	Śląskie	USA	Services-Business services	IT

5
Increase
80%

*-Firms annotated with 0 entered Poland after year 2000 and before 2006

Wielkopolskie						
Biofarma	1	Poznań	Wielkopolskie	France	Manufacture of pharmaceuticals	Biotech/Pharma
Aesculap AG	1	Nowy Tomyśl	Wielkopolskie	Germany	Manufacture of electrical machinery	Manufacture of medical equipment
Philips	1	Pila	Wielkopolskie	Netherlands	Manufacture of electrical machinery	R&D
ICN Switzerland AG	1	Poznań	Wielkopolskie	Switzerland	Manufacture of pharmaceuticals	Biotech/Pharma
H.J. Heinz Company	0	Pudliszki	Wielkopolskie	USA	Manufacture of food and drinks	Processing
Wm. Wrigley Jr. Company	0	Poznań	Wielkopolskie	USA	Manufacture of food and drinks	Manufacture of other foods
Dana Corporation	0	Gostyn	Wielkopolskie	USA	Manufacture of transport	Manufacture of parts
ArvinMeritor	0	Swarzędz	Wielkopolskie	USA	Manufacture of transport	Manufacture of parts
	5					
	Increase					
	60%					

*-Firms annotated with 0 entered Poland after year 2000 and before 2006

Notes

1 Location Choice and Clustering of Foreign Subsidiaries on the Economic Sustainability and Competitiveness of the Host Regions

1. The amount of FDI on a per capita basis in Poland is lower than in many of its neighbors. However, due to the country's large population size, total FDI amount is significant and exceeds that of its Central European neighbors.
2. As collected from industry annual white papers by Frost and Sullivan and the Polish Information and Foreign Investment Agency (PAIIZ) for the year 2008.

2 Heterogeneity of Economic Space: Introduction of the Problem

1. A powiat is a sub-region of a voivodship within the present, new, administrative division of Poland.
2. *Polska Klasyfikacja Dzialalnosci (PKD)*.
3. The phrase "flying geese pattern of development" was coined originally by Kaname Akamatsu in 1930s articles in Japanese. The late Saburo Okita (1914–1993), well-known Japanese economist and a foreign minister in the 1980s, greatly contributed to introducing the FG pattern of development to wider audiences, including the political and business world. Thus, the regional transmission of FG industrialization, driven by the catching-up process through diversification/rationalization of industries, has become famous as an engine of Asian economic growth (Kojima, 2000).
4. Originally, articles were published in Japanese and presented to world academia after World War II, in 1961; and in 1962 the articles were available in English.
5. Polska Agencja Informacji i Inwestycji Zagranicznych (PAIIZ). A Guide to Special Economic Zones in Poland in 2008.
6. EU membership requires adoption of EU legislation across a range of commercial and civil law, including trade rules, financial regulation, and competition policy (Bevan and Estrin, 2004).

3 Local Strengths and Foreign Firms' Location Choice: The Research Design, Data, and Methodology

1. *Powiat* is a region type, a number of which comprise a *województwo*, a main division unit of the country.
2. Secondary panel data.
3. The RDB data describe voivodships, *powiats*, and *gminas* as elements of social and administrative organization of the country, as well as regions

and sub-regions that are part of territorial units nomenclature, for statistical purposes. It collects, systematically completes, and updates statistical information on specific territorial division units.

4. Since 1975 the territorial administration of Poland consisted of 49 regions (voivodships, *województwo*), and 2,450 municipalities (*gminy*). In the 1990s a process of political and economic reform led to a new territorial administration, and in 2000, 16 regions (*województwo*, NUTS 2), 308 provinces or districts (*powiats*, NUTS 3), and 2,459 municipalities (NUTS 4) were constituted. At the same time, 50 Regional Development Agencies were created at regional and large city levels. http://www.west-east-id.net/download/marzo2006/WEID_Policy%20Options_%20Report_.pdf
5. As compared to other European countries, Poland is homogeneous in regards to nationality. It is estimated that no more than 3 percent of the total population is made up of national minorities. <http://www.development.wne.uw.edu.pl/index.php/Main/Students#Jobs>
6. 2000–2002 PKD categories; 2003 and on new (EU) PKD categories. Adjustments were made so that measures remain intact and accurately reflect the actual results. In 2003 the PKD categories have changed in preparation for transition to Poland's accession to the EU. The categories were adjusted to reflect continuity.
7. The sub-unit level analysis will be applied only in cases in which particular specialization of regions will need to be examined. In general, no particular analysis will be conducted as to up-stream and down-stream relationships between industries and firms.
8. Introduction of a new code classification, the PKD system, was induced by the merging of earlier PKD statistical code systems operational in the United Nations (ISIC/CPC), the European Union, (NACE/CPA) and in the countries of North America (NAICS). http://msp.money.pl/zakladam_firme/pkd2007/ (last accessed November 16, 2009).
9. The method used by Cantwell (1989) will be adopted here. "One of the main drawbacks of using absolute numbers of patents is the difficulty associated with then making comparisons between the activities of heterogeneous areas of technological endeavor. Since the propensity to patent is higher in certain fields of activity (for example, pharmaceuticals), this poses potential problems when undertaking comparative analyses" (Cantwell, 1989). Relatively, here, using this index, strengths between industries and countries of origin will be equalized.
10. The results of the analysis are presented in Appendix 1.
11. A *powiat* is a sub-region of a voivodship within the present administrative division of Poland.
12. Due to the problem of having only a single measure of value added in the manufacturing class, this research will test only a few, most represented, manufacturing RLA industrial classes to establish the relationship between the industrial concentration of foreign firms and value-added in those selected industries.
13. As found in: http://www.paiz.gov.pl/prawo/prawo_konkurencji/artykuly/szczegolna_pozycja_msp. Act of WE (Wspólnota Europejska) related to small and medium firms (Dz.U. WE L 10 of January 13, 2001: p. 33).

4 Concentration of Foreign Firms in Poland based on Industrial Specialization and Country-of-Origin Criteria: The Results and Summary of the Evidence

1. *The Chemical and Plastic Industries in Poland*. PAIIZ Report 2008.
2. Ibid.
3. White Paper: "The Biotechnology Sector in Poland." Published by Frost and Sullivan and the Polish Information and Foreign Investment Agency (PAIIZ). October 2008.
4. Ibid.
5. Ibid. The park is expected to have been realized in the years 2007–2015. Phase I of the project was to have been completed by the year 2010. It consists of creating a technology incubator and a research centre financed by public funds.
6. PAIIZ Sectoral Study Report 2013. *Pharmaceutical and Biotechnological Sector in Poland*. February 19, 2013
7. Frost and Sullivan and the Polish Information and Foreign Investment Agency (PAIIZ). October 2008.
8. Although outside of the time frame of this study, Dell Ireland moved to Poland in 2008. Dell moved production of computer systems for customers in Europe, the Middle East and Africa (EMEA) from Limerick to its Polish facility. (last accessed September 27, 2010: http://www.dell.com/content/topics/global.aspx/corp/pressoffice/en/2009/2009_01_08_rr_000?c=us&l=en).
9. PAIIZ Sectoral Study Report 2013. *Information Technology Sector in Poland*. February 19, 2013.
10. *Poland Electrical Industry*. PAIIZ Report 2008.
11. PAIIZ Sectoral Report for 2008. http://www.paiz.gov.pl/publications/sectoral_studies; (last accessed December 17, 2008).
12. Ibid.
13. The reclassification of the old PKD categories took place in 2003 to reflect the EU PKD categories which were implemented and took effect on data in 2004 when Poland joined the EU.
14. *The Aviation Sector in Poland*. PAIIZ Report, 2008.
15. Ibid.
16. As of May 1, 2004, foreign residents and investors from the member states of the European Economic Community are not required to obtain a license/permit from the Ministry of Internal Affairs for purchase of property, with the exception of: agricultural and forest properties for the period of 12 years from the date of accession of the Republic of Poland to the European Union. (author's translation) http://www.cudzoziemcy.pl/index.php?l_prawo_artid=article3214&l_prawo_ct=cat333&s=prawo&lang=pl
17. As presented in Farnoux et al. (2004), with the original source being Banque de France calculations, based on NBP data.
18. *ECB Monthly Bulletin*, July 2002. "The Eurosystem's dialogue with accession countries."
19. Polish Information and Foreign Investment Agency. *Poland's Construction Industry*. http://www.paiz.gov.pl/files/?id_plik=10558 (last accessed June 20, 2013).

20. PAIZ data – description of PKD class and sub-class.
21. A single investor in a class in the whole country would give a region an RLAI advantage measure. Therefore, for the purposes of this research, this will be discounted as a term of a relative strength.
22. That was the case only throughout the period of this study. In 2009, the foreign investor withdrew in light of the global economic decline and low demand for the products in foreign markets. The firm itself was bought back by the employees.
23. Campos and Kinoshita (2006). *Foreign Direct Investment in Sub-Saharan Africa: Origins, Targets, Impact and Potential*. Edited by S. Ibi Ajayi. Published by African Economic Research Consortium.
24. Represented as average monthly gross wages and salary in relation to the average domestic – Poland = 100.

6 Final Analysis of FDI Patterns Across Regions in Poland and Policy Recommendations

1. Campos and Kinoshita, (2006). *Foreign Direct Investment in Sub-Saharan Africa: Origins, Targets, Impact and Potential*. Edited by S. Ibi Ajayi. Published by: African Economic Research Consortium.

7 Afterword

1. Adekoya, R. (2013). “Poland a European leader in FDI job creation.” <http://www.wbj.pl/article-62974-poland-a-european-leader-in-fdi-job-creation.html> (last accessed July 5, 2013)
2. Ibid.

References

- Acs, Z. J., Morck, R., Shaver, J. M., and Yeung, B. (1996). "The internationalization of small and medium-sized enterprises: a policy perspective." *Small Business Economics*, Vol. 9: 7–20.
- Acs, Z. J., Morck, R., Shaver, J. M., and Yeung, B. (1997). "The internationalization of small and medium-sized enterprises: a policy perspective." *Small Business Economics*, Vol. 9, No. 1, (February).
- Aitken, B. and Harrison, A. (1999). "Do domestic firms benefit from direct foreign investment? Evidence from Venezuela." *The American Economic Review*, Vol. 89, No. 3, (June): 605–618.
- Alcácer, J. and Chung, W. (2007). "Location strategies and knowledge spillovers." *Management Science*, Vol. 53, No. 5: 760–776.
- Ambos, B. (2005). "Foreign direct investment in industrial research and development: a study of German MNCs." *Research Policy*, Vol. 34, No. 4: 395–410.
- Arthur, B. (1986). "Industry location patterns and the importance of history." CEPR Paper No. 84, Stanford.
- (1989). "Competing technologies, increasing returns, and lock-in by historical events." *The Economic Journal*, Vol. 99, No. 394: 116–131.
- Athreye, S. and Cantwell, J. (2007). "Creating competition? Globalisation and the emergence of new technology producers." *Research Policy*, Vol. 36, No. 2: 209–226.
- Audretsch, D. B. and Feldman, M. P. (1994). "External economies and spatial clustering," in P. Krugman and A. Venables (eds), *The Location of Economic Activity: New theories and Evidence*. London: Center of Economic Policy Research.
- Audretsch, D. B. and Stephan, P. E. (1996). "Company-scientist locational links: the case of biotechnology." *The American Economic Review*, Vol. 86, No. 3: 641–652.
- Bandera, V. N. and White, J. T. (1968). "U.S. direct investments and domestic markets in Europe." *Economia Internazionale*, Vol. 21, (February): 117–133.
- Baptista R. and Swann, G. M. P. (1998). "Do firms in clusters innovate more?" *Research Policy*, 27: 525–540.
- Barrios, S., Bertinelli, L., and Strobl, E. (2006). "Coagglomeration and spillovers." *Regional Science and Urban Economics*, Vol. 36, No. (4): 467–481.
- Barro, R. and Martin, S. I. (1995). *Economic Growth*. New York: McGraw-Hill.
- Bartik, T. J. (1985). "Business location decisions in the United States: estimates of the effects of unionization, taxes, and other characteristics of states." *Journal of Business & Economic Statistics*, Vol. 3, No. 1: 14–22.
- Berry, H. (2006). "Leaders, laggards, and the pursuit of foreign knowledge." *Strategic Management Journal*, Vol. 27: 151–168.
- Bevan, A. A. and Estrin, S. (2004). "The determinants of foreign direct investment into European transition economies." *Journal of Comparative Economics*, Vol. 32, No. 4: 775–787.
- Birkinshaw, J. and Hood, N. (1998). "Multinational subsidiary evolution: Capability and charter change in foreign-owned subsidiary companies." *The Academy of Management Review* Vol. 23, No. 4: 773–795.

- Blomstrom, M. (1991). "Host country benefits of foreign investment." NBER Working Paper No. W3615 (February), Available at SSRN: <http://ssrn.com/abstract=268197>.
- Borensztein, E., De Gregorio, J., and Lee, J.-W. (1993). "How does foreign direct investment affect economic growth?" *Journal of International Economics*, Vol. 45 (1998): 115–135.
- Blomström, M. and Kokko, A. (1997). *How Foreign Investment Affects Host Countries*. World Bank, International Economics Department, International Trade Division.
- Boudier-Bensebaa, F. (2005). "Agglomeration economies and location choice: foreign direct investment in Hungary." *Economics of Transition*, Vol. 13, No. 4: 605–628.
- Braunerhjelm, P. (2008). "Specialization of regions and universities: the new versus the old." *Industry and Innovation*, Vol. 15, No. 3: 253–275.
- Brühlhart, M. (1998). "Trading places: industrial specialization in the European Union." *JCMS: Journal of Common Market Studies*, Vol. 36, No. 3: 319–346.
- Campos, N. and Kinoshita, Y. (2003). "Why does FDI go where it goes? New evidence from the transition economies." IMF Working Paper.
- (2006). *Foreign Direct Investment in Sub-Saharan Africa: Origins, Targets, Impact and Potential*, edited by Ibi Ajayi. African Economic Research Consortium.
- Cantwell, J. A. (1989). *Technological Innovation and Multinational Corporations*. Oxford: Blackwell.
- (1991a). "The international agglomeration of R&D," in M. Casson (ed.), *Global Research Strategy and International Competitiveness*. Oxford: Blackwell.
- (1991b). "The theory of technological competence and its application to international production," in D. McFetridge (ed.), *Foreign Investment, Technology and Economic Growth*. Calgary: University of Calgary Press.
- (ed.) (1994). *Transnational Corporations and Innovative Activities*. *United Nations Library on Transnational Corporations*. London: Routledge.
- (2000). "Technological lock-in of large firms since the interwar period." *European Review of Economic History*, Vol. 4: 147–174.
- (2009). "Location and the multinational enterprise." *Journal of International Business Studies*, Vol. 40: 35–41.
- Cantwell, J. A. and Iammarino, S. (1998). "MNCs, technological innovation and regional systems in the EU: some evidence in the Italian case." *International Journal of the Economics of Business*, Vol. 5, No. 3: 383–408.
- (2000). "Multinational corporations and the location of technological innovation in the UK regions." *Regional Studies*, Vol. 34: 317–332.
- (2001). "EU regions and multinational corporations." *Industrial and Corporate Change*, Vol. 10, No. 4.
- (2003). *Multinational Corporations and European Regional System of Innovation*. New York: Routledge.
- Cantwell, J. A., Iammarino, S., and Noonan, C. A. (2000). "Sticky places in slippery space – the location of innovation by MNCs in the European regions," in N. Pain (ed.), *Inward Investment, Technological Change and Growth: The impact of MNCs on the UK economy*. Oxford: Pergamon, 210–239.
- Cantwell J. A. and Janne, O. (1999). "Technological globalisation and innovative centres: the role of corporate technological leadership and locational hierarchy." *Research Policy*, Vol. 28: 119–144.

- Cantwell, J. A. and Mudambi, R. (2000). "The location of MNE R&D activity: the role of investment incentives." *Management International Review*, Vol. 40, No. 1: 127–148.
- (2005). "MNE competence-creating subsidiary mandates." *Strategic Management Journal*, Vol. 26: 1109–1128.
- (2011). "Physical attraction and the geography of knowledge sourcing in multinational enterprises." *Global Strategy Journal*, Vol. 1, No. (3–4): 206–232.
- Cantwell, J. A. and Piscitello, L. (1997). *The Emergence of Corporate International Networks for Accumulation of Dispersed Technological Competences*. Whiteknights: University of Reading.
- (2002). "Agglomeration and location of foreign R&D activities in the European regions," proceedings of the 28th Annual Conference of the European International Business Academy, Athens (December).
- Cantwell, J. A. and Vertova, G. (2004). "Historical evolution of technological diversification." *Research Policy*, Vol. 33, No. 3: 511–529.
- Carter, F. and Turnock, D. (2005). *Foreign direct investment and regional development in East Central Europe and the Former Soviet Union: A Collection of Essays*. Ashgate Publishing.
- Caves, R. (1971). "International corporations: the industrial economics of foreign investment." *Economica*, Vol. 56: 279–293.
- Chen, H. and Chen, T.-J. (1998). "Network linkages and location choice in foreign direct investment." *Journal of International Business Studies*, Vol. 29, No. 3: 445–468.
- Cheng, L. K. and Kwan, Y. K. (1999). "FDI stock and its determinants," in Y. Wu (ed.), *Foreign Direct Investment and Economic Growth in China*. Cheltenham: Edward Elgar, 42–56.
- (2000). "What are the determinants of the location of foreign direct investment? The Chinese experience." *Journal of International Economics*, Vol. 51, No. 2: 379–400.
- Cheng, Y. (2009). "Determinants of FDI mode choice: acquisition, brownfield, and greenfield entry in foreign markets." *Canadian Journal of Administrative Sciences*, Vol. 23, No. 3: 202–220.
- Chidlow, A., Salciuvienė, L., and Young, S. (2009). "Regional determinants of inward FDI distribution in Poland." *International Business Review*, Vol. 18, No. 2: 119–133.
- Chung, W. and Alcácer, J. (2002). "Knowledge seeking and location choice of foreign direct investment in the United States." *Management Science*, Vol. 48, No. 12: 1534–1554.
- Cieślak, A. (2004). *Location of multinational firms and national border effects: The Case of Poland*. Warsaw: Warsaw University.
- Crozet, M., Mayer, T., and Mucchielli, J.-L. (2003). "How do firms agglomerate? A study of FDI in France." CEPR Discussion Papers, International Trade No. 3873. London: Centre for Economic Policy Research.
- Coughlin, C. C., Terza, J. V., and Arromdee, V. (1991). "State characteristics and the location of foreign direct investment within the United States." *The Review of Economics and Statistics*, Vol. 65: 675–683.
- Culem, C. G. (1988). "The locational determinants of direct investments among industrialized countries." *European Economic Review*, Vol. 32, No. 4: 885–904.

- David, P. and Rosenbloom, J. (1990). "Marshallian factor market externalities and the dynamics of industrial localization." *Journal of Urban Economics*, Vol. 28: 349–370.
- de Mello Jr, L. R. (1997). "Foreign direct investment in developing countries and growth: a selective survey." *The Journal of Development Studies*, Vol. 34, No. 1: 1–34.
- De Propriis, L., Driffield, N., and Menghinello, S. (2005). "Local industrial systems and the location of FDI in Italy." *International Journal of the Economics of Business*, Vol. 12, No. 1, (February): 105–121.
- Despina-Zochowska, B. A. (2001). "The Marshallian district – an attempt to interpret regional development in Poland." Paper presented at Regional Studies Association International conference, Regional Transitions European Regions and the Challenges of Development, Integration and Enlargement. Gdańsk.
- Devereux, M. P., Griffith, R., and Simpson, H. (2004). "The geographic distribution of production activity in the UK.." *Regional Science and Urban Economics*, Vol. 34, No. 5: 533–564.
- Dunning, J. H. (1977). "Trade, location of economic activity and the multinational enterprise: the search for an eclectic approach," in B. Ohlin, P. O. Hesselborn, and P. M. Wijkman (eds), *The International Location of Economic Activity*. London: Macmillan.
- (1981). *International Production and the Multinational Enterprise*. London: Allen & Unwin.
- (1993). *Multinational Enterprises in the Global Economy*. Wokingham, Berks: Addison-Wesley.
- (1995). "Reappraising the eclectic paradigm in an age of alliance capitalism." *Journal of International Business Studies*, Vol. 26.
- (1997). *Alliance Capitalism and Global Business*. London: Routledge.
- Dunning, J. H. (2002). *Regions, Globalization, and the Knowledge-Based Economy*. Oxford: Oxford University Press.
- Ellison, G. and Glaeser, E. L. (1997). "Geographic concentration in U.S. manufacturing industries: a dartboard approach." *Journal of Political Economy*, Vol. 105, No. 5, 879–927.
- Ergas, H. (1986). "Does technology policy matter?" CEPR Conference, London.
- European Central Bank (2002). "The Eurosystem's dialogue with accession countries." *ECB Monthly Bulletin*, (July).
- Evans, C. (2003). "The economic significance of national border effects." *American Economic Review*, Vol. 93: 1291–1312.
- Farnoux, L. et al. (2004). "Foreign direct investment in the Polish financial sector." Case study prepared for the CGFS Working Group on Financial Sector FDI.
- Feenstra, R. C. and Hanson, G. (1997). "Foreign direct investment and relative wages: evidence from Mexico's maquiladoras." *Journal of International Economics*, Vol. 42, No. 3–4: 371–393.
- Feenstra, R. C. and Markusen, J. R. (1994). "Accounting for growth with new inputs." *International Economic Review*, 429–447.
- Florida, R. (1995). "Toward the learning region." *Futures*, Vol. 27, No. 5: 527–536.
- (1997). "The globalization of R&D: results of a survey of foreign-affiliated R&D laboratories in the USA." *Research policy*, Vol. 26, No. 1: 85–103.
- Ford, S. and Strange, R. (1999). "Where do Japanese manufacturing firms invest within Europe, and why?" *Transnational Corporation*, Vol. 8, No. 1: 117–142.

- Frost and Sullivan and the Polish Information and Foreign Investment Agency (PAIIZ) (2008). "The Biotechnology Sector in Poland." White Paper, (October).
- (2008). "The Renewable Energy Sector in Poland." White Paper, (October).
- Fujita, M. and Krugman, P. (2004). "The new economic geography: past, present and the future." *Papers in Regional Science*, Vol. 83: 139–164.
- Fujita, M. and Thisse, J. F. (1996). "Economics of agglomeration." *Journal of the Japanese and International Economies*, Vol. 10, No. 4: 339–378.
- Glaeser, E. L. and Kohlhase, J. E. (2003). "Cities, regions and the decline of transport costs." NBER Working Paper No. 9886.
- Globerman, S. (2001). "The location of higher value added activities." Occasional Paper No. 27, Western Washington University.
- Główny Urząd Statystyczny (GUS). Report: *Value Added Activity 2000–2006*.
- Report: *Działalność gospodarcza spółek z udziałem 2005*.
- Report: *Działalność innowacyjna przedsiębiorstw 2002–2004*.
- Guimarães, P., Figueiredo, O., and Woodward, D. (2000). "Agglomeration and the location of foreign direct investment in Portugal." *Journal of Urban Economics*, Vol. 47, No. 1: 115–135.
- Harrison, B. (1994). *Lean and mean: The Changing Landscape of Power in the Age of Flexibility*. New York: Basic Books.
- He, C. (2002). "Information costs, agglomeration economies and the location of foreign direct investment in China." *Regional Studies*, Vol. 36, No. 9: 1029–1036.
- Head, K., Ries, J., and Swenson, D. (1995). "Agglomeration benefits and location choice: evidence from Japanese investment in the United States." *Journal of International Economics*, Vol. 38, No. 3/4: 223–247.
- (1999). "Attracting foreign manufacturing: investment promotion and agglomeration." *Regional Science and Urban Economics*, Vol. 29, No. 2: 197–218.
- Index Mundi (2013). *Poland Economy Profile 2013*. Report, http://www.indexmundi.com/poland/economy_profile.html Last accessed August 15, 2013.
- Jaffe, A. B. (1989). "Real Effects of Academic Research." *The American Economic Review*, Vol. 79, No. 5 (December): 957–970.
- Jaffe, A. B., Trajtenberg, M., and Henderson, R. (1993). "Geographic localization of knowledge spillovers as evidence by patent citations." *Quarterly Journal of Economics*, Vol. 108, No. 3: 577–98.
- Javorcik, B. S. and Spatareanu, M. (2003). "To share or not to share: does local participation matter for spillovers from foreign direct investment?" World Bank, Working Paper No. 3118.
- (2008). "To share or not to share: does local participation matter for spillovers from foreign direct investment?" *Journal of Development Economics*, Vol. 85, No. 1, 194–217.
- Javorcik, B. S. (2004). "Does foreign direct investment increase the productivity of domestic firms? In search of spillovers through backward linkages." *The American Economic Review*, Vol. 94, No. 3: 605–627.
- Kaldor, N. (1955–1956). "Alternative theories of distribution." *The Review of Economic Studies* Vol. 23, No. 2: 83–100.
- Ketels, M. and Memedovic, O. (2008). "From clusters to cluster-based economic development." *International Journal of Technological Learning, Innovation and Development*, Vol. 1, No. 3.
- Kindleberger-Audretsch. (1983). *Multinational Corporation in the 1980*. Mit Press. Chapter 2 by Kogut, B.

- Kojima, K. (2000). "The 'flying geese' model of Asian economic development: origin, theoretical extensions, and regional policy implications." *Journal of Asian Economics*, Vol. 11: 375–401.
- Knickerbocker, F. T. (1973). *Oligopolistic Reaction and Multinational Enterprise*. Boston: Harvard University.
- Kogut, B. and Chang, S. J. (1991). "Technological capabilities and Japanese foreign direct investment in the United States." *Review of Economics and Statistics*, Vol. 73: 401–413.
- (2010). "Urbanization, agglomeration, and coagglomeration of service industries," in *Agglomeration Economics*. University of Chicago Press, (151–180).
- Kuemmerle, W. (1999a). "The drivers of foreign direct investment into research and development – an empirical investigation." *Journal of International Business Studies*, Vol. 30: 1–24.
- (1999b). "Foreign direct investment in industrial research in the pharmaceutical and electronics industries – results from a survey of multinational firms." *Research Policy*, Vol. 28, No. 2: 179–193.
- Krugman, P. (1991). "Increasing returns and economic geography." *Journal of Political Economy*, Vol. 99: 483–499.
- (1998). "What's new about the new economic geography?" *Oxford Review of Economic Policy*, Vol. 14: 7–17.
- Langhorne, R. (2001). *The Coming of Globalization: Its Evolution and Contemporary Consequences*. Palgrave MacMillan.
- Lansbury, M., Pain, N., and Smidkova, K. (1996). "Foreign direct investment in Central Europe since 1990: an econometric study." *National Institute Economic Review*, No. 156.
- Leahy, D. and Pavelin, S. (2003). "Follow-my-leader FDI and tacit collusion." *International Journal of Industrial Organization*, Vol. 21, No. 3: 439–453.
- (2008). "Playing away to win at home." *Journal of Economics and Business*, Vol. 60, No. 5: 455–468.
- Lin, P. and Saggi, K. (1999). "Incentives for foreign investment under imitation." *The Canadian Journal of Economics*, Vol. 32, No. 5, (November): 1275–1298.
- (2002). "Timing of entry under externalities." *Journal of Economics*, Vol. 75, No. 3: 211–225.
- Lipsey, R. E. (2002). "Home and host country effects of FDI." NBER Working Paper No. 9293. Cambridge, MA: National Bureau of Economic Research.
- Lipsey, R. E. and Kravis, I. B. (1985). "The competitive position of U.S. manufacturing firms." NBER Working Paper Series, January 1985.
- Little, J. S. (1978). "Location decision of foreign direct investment in the United States." *New England Economic Review*, Vol. 4, No. 4: 43–63.
- Lundvall, B. A. (1986). *Technological Unemployment in a Small Open Economy*. Institute of Production, Aalborg University.
- Malecki, E. (1997). "Technology and economic development: the dynamics of local, regional, and national change." University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.
- (1980) "Dimensions of R&D location in the United States." *Research Policy*, Vol. 9: 2–22.
- Mariotti, S. and Piscitello, L. (1995). "Information costs and location of FDIs within the host country: empirical evidence from Italy." *Journal of International Business Studies*, Vol. 26, No. 4.

- Marshall, A. (1920). *Principles of Economics* (8th edn.). London: Macmillan.
- Marshall, A. and Marshall, M. P. (1920). *The Economics of Industry*. London: Macmillan.
- Martin, R. and Sunlay, P. (2003). "Deconstructing clusters: chaotic concept or policy panacea?" *Journal of Economic Geography*, Vol. 3: 5–35.
- Mutinelli, M. and Piscitello, L. (1998). "The entry mode choice of MNEs: an evolutionary approach." *Research Policy*, Vol. 27, No. 5: 491–506.
- Nachum, L. and Keeble, D. (2003). "Neo-Marshallian clusters and global networks: the linkages of media firms in Central London." *Long Range Planning*, Vol. 36, No. 5, (October): 459–480.
- Nelson, R. R. (ed.) (1993). *National Innovation Systems: A comparative analysis*. Oxford: Oxford University Press.
- Pavlínek, P. (2004). "Regional development implications of foreign direct investment in Central Europe." *European Urban and Regional Studies*, Vol. 11, No. 1: 47–70.
- Polska Agencja Infirmacji i Inwestycji Zagranicznych (PAIIZ). Annual reports. Data tables years 2000–2006.
- A Guide to Special Economic Zones in Poland in 2008.
- Pitelis, N. Ch. (2010). "Foreign direct investment and economic integration." MPRA Paper No. 23938, posted 17 July.
- Polish Information and Foreign Investment Agency. "Poland's Construction Industry." http://www.paiz.gov.pl/files/?id_plik=10558 Last Accessed November 20, 2009.
- (2008a). *The Aviation Sector in Poland*. PAIIZ Report.
- (2008b). *Poland's Electrical Industry*. PAIIZ Report.
- (2008c). *Poland's Agribusiness Industry*. PAIIZ Report.
- Porter, M. (1985). *Competitive Advantage*. New York: Free Press.
- (1990). *The Competitive Advantage of Nations*. New York: Free Press.
- (1996). "What is strategy?" *Harvard Business Review*, Vol. 74, No. 6: 61–78.
- (1998a). "Clusters and competition: new agendas for companies, governments, and institutions," in M. Porter, *On Competition*. Boston: Harvard Business School Press, 19–287).
- (1998b). "The microeconomic foundations of economic development." *The Global Competitiveness Report 1998*. Geneva: World Economic Forum, 38–63.
- (2000). "Location, competition, and economic development: local clusters in a global economy." *Economic Development Quarterly*, Vol. 14, No. 1, (February): 15–34.
- Porter, M., Ketels, Ch., and Delgado, M. (2006). "The microeconomic foundations of prosperity: findings from the Business Competitiveness Index." *The Global Competitiveness Report 2007–2008*, World Economic Forum.
- Porter, M. and Stern, S. (2001). "Location matters." *Sloan Management Review*, Vol. 42, No. 4: 28–36.
- Rugman, A. and Verbeke, A. (2001). "Subsidiary-specific advantages in multinational enterprises." *Strategic Management Journal*, Vol. 22, No. 3: 237–250.
- Sampson, R. C. (2004). "Organizational choice in R&D alliances: Knowledge-based and transaction cost perspectives." *Managerial and Decision Economics*, Vol. 25, No. 6–7: 421–436.
- Saxenian, A., (1994). *Regional Advantage*. Cambridge: Harvard University Press.
- Scaperlanda, A. and Mauer, L. J. (1969). "The determinants of U.S. direct investment in the EEC." *American Economic Review*, Vol. 59, (September): 558–568.

- Schumpeter, J. A. (1942). *Capitalism, Socialism, and Democracy*. New York: Harper & Bros.
- (1954). *History of Economic Analysis*. Routledge. (First edition by New York: Oxford University Press).
- (1994). *History of Economic Analysis*. Routledge. (First edition, New York: Oxford University Press, 1954).
- Shaver, J. M. (1998a). "Accounting for endogeneity when assessing strategy performance: does entry mode choice affect FDI survival?" *Management Science*, Vol. 44, No. 4: 571–585.
- (1998b). "Do foreign-owned and U.S.-owned establishments exhibit the same location pattern in U.S. manufacturing industries?" *Journal of International Business Studies* 3rd Quarter, Vol. 29, No. 3.
- Shaver, J. M. and Flyer, F. (2000). "Agglomeration economies, firm heterogeneity, and foreign direct investment in the United States." *Strategic Management Journal*, Vol. 21: 1175–1193.
- Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*. Dunwoody, GA: Norman S. Berg.
- Smith, D. F. and Florida, R. (1994). "Agglomeration and industrial location: an econometric analysis of Japanese-affiliated manufacturing establishments in automotive-related industries." *Journal of Urban Economics*, Vol. 36, No. 1, (July): 23–41.
- Soete, L. (1987). "The impact of technological innovation on international trade patterns: the evidence reconsidered." *Research Policy*, Vol. 16, No. 2–4, (August): 101–130.
- Storper, M. (1992). "The limits to globalization: technology districts and international trade." *Economic Geography*, Vol. 68, No. 1: 60–93.
- (1995). "The resurgence of regional economies, ten years later. The region as a nexus of untraded interdependencies." *European Urban and Regional Studies*, Vol. 2, No. 3: 191–221.
- Tang, H., Zoli, E., and Klytchnikova, I. (2000). "Banking crises in transition countries: fiscal costs and related issues." World Bank Policy Research Paper No. 2484, Washington, D.C.
- (1826, trans. 1966) *Von Thünen's Isolated State: An English Edition of Der Isolie STaat*, trans. C. M. Wartenberg, edited and with an introduction by P. Hall. Oxford: Pergamon.
- Venables, A. J. (1996). "Equilibrium locations of vertically linked industries." *International Economic Review*, Vol. 37, No. 2.
- (1999). "But why does geography matter, and which geography matters?" *International Regional Science Review*, Vol. 22, No. 2: 238–241.
- Vernon, R. (1966). "International investment and international trade in the product cycle." *Quarterly Journal of Economics*, Vol. 80: 190–207.
- (1974). "The location of economic activity," in J. H. Dunning (ed.), *Economic Analysis and the Multinational Enterprise*. London: Allen & Unwin.
- Webber, M. J. (1972) *Impact of Uncertainty on Location*. London: MIT Press.
- (1984) *Industrial Location*. London: Sage.
- Weber, A. (1909, reprinted 1929). *Theory of the Location of Industries*, trans. C. J. Friedrich. Chicago: University of Chicago Press.
- Wells, L. T. (ed.) (1972). *The Product Life Cycle and International Trade*. Cambridge, MA: Harvard University Press.

- Wheeler, D. and Mody, A. (1992). "International investment location decisions. The case of U.S. firms." *Journal of International Economics*, Vol. 33, No. 1-2, (August): 57-76.
- Woodward, D. P., (1992). "Locational determinants of Japanese manufacturing start-ups in the United States." *Southern Economic Journal*, Vol. 58, No. 3: 690-708.
- Zhao, C. (2009). *Global Knowledge Linkages and the Innovativeness of Local Clusters: Evidence from the Guangzhou Software Cluster in China*. IBIMA Business Review.

Index

- 3M Nederland B.V., 162
- Acs, Z. J., 9, 16, 20
- Aesculap AG, 166
- agglomeration, 2, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 20, 23, 27, 36, 40, 45, 49, 51, 102, 156, 157, 158, 159, 160, 163, 184, 294, 297, 298
- agglomerative forces, 14, 39
- agriculture, hunting, and forestry, 55, 86, 231
- Aitken, B., 25
- Alcácer, J., 16, 18, 21, 23, 41, 49, 52, 161, 180, 181, 184
- Ambos, B., 9
- Arthur, B., 8, 17, 156, 185
- ArvinMeritor, 166
- Athreye, S., 10
- Audretsch, D. B., 9, 16, 17
- Austria, 104, 132
- Autoliv AB, 176
- availability of skilled labor, 13, 21, 33, 45, 64, 133, 144, 151, 153, 186
- Aviation Sector, 81, 291, 299
- Aviation Valley, 81
- Ballinger Holdings Ltd., 162
- Bandera, V. N., 9, 16
- Baptista, R., 22, 155
- Barrios, S., 13
- Barro, R., 10
- Bartik, T. J., 17, 23
- Belgium, 104
- Berry, H., 11, 12, 18, 19, 21, 49, 159, 181
- Bevan, A. A., 26, 290
- Birkinshaw, J., 19, 50, 160
- Blomström, M., 1, 6, 47
- Borensztein, E., 2, 24, 42, 44
- Braunerhjelm, P., 17
- brownfield investment, 25, 26
- Brühlhart, M., 15
- Campos, N., 46, 101, 184, 292
- Canada, 131, 173
- Cantwell, J. A., 7, 8, 14, 17, 22, 36, 39, 47, 50, 101, 152, 157, 160, 179, 290
- capital investment, 86, 166
- Caterpillar, Inc., 176
- Central Europe, 1, 25, 189, 190
- Central Statistical Office, 30, 31, 32
- Cheng, L. K., 23, 184
- Cheng, Y., 26
- Chidlow, A., 23, 26, 32, 34
- Chung, W., 17, 19, 23
- Ciešlik, A., 23, 32, 34, 42, 54, 184
- Cigna Global Holdings, Inc., 162
- Citigroup, 162
- cluster creation, 17, 27
- cluster formation, 2, 5
- clustering, 2, 3, 6, 7, 10, 11, 16, 18, 20, 21, 27, 37, 49, 102, 187
- Colgate-Palmolive America, 162
- co-location of firms, 17
- comparative advantages, 69
- competition, 6, 12, 15, 18, 22, 26, 163
- complementary interdependence, 18, 49
- computer and related activities, 86
- concentration of FDI, 21, 29, 44, 46, 47, 58, 144, 154, 155, 186
- concentration of foreign firms in Poland, 2, 48, 151
- concentration of foreign firms in the regions, 43, 44, 47
- construction, 92, 95, 118, 122, 128, 134, 140, 143, 158
- consumer goods, 20, 69, 70, 114, 135
- Coughlin, C. C., 17, 23
- Culem, C. G., 45, 153
- David, P., 4, 8, 156
- de Mello Jr, L. R., 7, 10, 16, 188
- De Propriis, L., 8, 18, 101, 157
- decision making, 11, 12, 18, 28, 48, 54, 100, 133, 137, 152, 154

- Delphi Automotive Systems, 79
Denmark, 69, 104, 107, 110
Despiney-Zochowska, B. A., 32, 34, 66, 86
developed countries, 22, 28, 188
developing countries, 5, 20, 26, 47, 190, 296
development path, 8, 23, 39, 53, 156, 157, 185
Devereux, M. P., 13
Dolnośląskie, 34, 60, 62, 64, 65, 69, 71, 75, 79, 86, 95, 100, 101, 112, 116, 122, 125, 128, 132, 134, 136, 143, 148, 154, 176, 178, 181, 184
domestic firms, 10, 16, 293, 297
domestic market, 46, 154
dominance, 34, 60, 65
downstream, 4, 13, 14
Dunning, J. H., 6, 8, 9, 14, 17, 23, 46, 152

eclectic paradigm, 8
economic development phase, 10, 21
economic drivers, 2
economic environment, 1, 20, 88, 158, 188
economic structure, 8, 16, 101, 183
economies of scale, 20
electricity, gas, and water, 58, 59, 99, 134, 137, 138, 156, 173
electricity, gas, and water supply, 43
Eli Lilly Nederland, 162
Ellison, G., 4, 12, 14, 39, 45, 54, 158
employment, 13, 133
Ergas, H., 36
European Central Bank, 88
European Nomenclature of Territorial Units of Statistics, 30
European Union, 1, 3, 15, 23, 26, 32, 42, 53, 54, 58, 66, 86, 100, 104, 131, 164, 184, 185, 189
Evans, C., 23, 184
evolutionary path, 7
exogenous markets, 23, 24, 55, 69, 79
exports, 11, 69, 95, 102
externalities, 4

Farnoux, L., 88, 291
FDI distribution, 12, 18, 49, 159

Feenstra, R. C., 14, 18
financial intermediation, 88, 100, 104, 107, 112, 134, 137, 152, 162
Finland, 104, 110, 132
Florida, R., 9, 14, 19, 46
flying geese (FG) model, 20, 102
foreign direct investment, 1, 3, 12, 24, 26, 42, 65, 66, 183
foreign investment patterns, 2
Fortune 500 companies, 2, 48, 49, 51, 159, 161
France, 62, 104, 132, 165, 168, 173
Fujita, M., 11, 13, 17

GDP, 41, 88, 155, 190
General Electric Corporation (GE), 162
General Mills, 173
General Motors Corporation, 170
geographic concentration, 4, 13, 14, 29, 44
Germany, 62, 69, 84, 104, 112, 132, 189
Glaeser, E. L., 4, 12, 13, 39, 45, 46, 54, 158
globalization, 6, 183
Główny Urząd Statystyczny (GUS), 30
gminas, 30
Goodrich Aerospace Canada LTD, 79
greenfield investment, 25, 26, 185

H. J. Heinz Company, 166
Harrison, B., 16, 17
Head, K., 8, 18, 101, 157
health and social work, 44, 195
heterogeneity, 3, 27, 53, 54, 183
hierarchy of the regions, 38, 51, 160
host country, 10, 42, 45, 183
hotels and restaurants, 92, 134, 143, 145, 156
human capital, 10, 42, 45

imitation, 12
Index Mundi, 190
indigenous firms, 7, 100
industrial agglomerations, 4, 11, 19, 41, 48
industrial centers, 2, 12, 19, 21, 65, 158

- industrial classification, 3, 29, 35, 48
 industrial development, 8, 9, 23, 48, 53, 101, 152, 156, 157, 185
 industrial specialization, 3, 7, 9, 13, 15, 18, 27, 28, 36, 38, 39, 40, 41, 44, 45, 47, 54, 55, 100, 101, 102, 114, 137, 143, 145, 151, 153, 156, 157, 158, 160, 165, 166, 168, 173, 176, 181, 183, 184, 185, 189, 190, 191, 294
 industrial structure, 22, 24, 26, 47
 industrial trajectory, 7, 27, 34, 40
 industrial trajectory development, 40
 industry leading firm(s), 51
 innovation, 6, 10, 17, 21, 22, 23, 47, 152, 187
 intellectual property, 24, 185
 inter-industry, 4, 16, 20, 40, 102
 intermediate inputs, 18, 24, 46
 intra-industry, 4, 16, 20, 40, 102
 investment in R&D, 41, 133, 147, 148, 151, 155, 186
 Italy, 62, 104

 Jaffe, A. B., 6, 9, 16
 Japan, 104
 Japanese, 116, 117, 118
 Javorcik, B. S., 10, 25

 Kaldor, N., 9
 Ketels, M., 22, 155, 156
 Knickerbocker, F. T., 2, 10, 18, 39, 49, 52, 102, 159, 160, 179
 know-how, 9, 19, 25, 151
 knowledge creation, 7, 16, 17, 22, 27
 Kojima, K., 10, 20, 39, 40, 102, 179, 290
 Krugman, P., 2, 4, 6, 8, 17, 20, 54, 101, 157, 184
 Kuemmerle, W., 16, 19
 Kujawsko-Pomorskie, 55, 60, 75, 84, 107, 114, 134, 137, 140, 142, 147, 150, 151, 152, 155, 163, 173
 labor cost, 44, 45, 46, 140, 142, 143, 153, 165, 186, 241
 Langhorne, R., 46
 Lansbury, M., 17, 27
 leading firms, 2, 3, 11, 12, 14, 18, 28, 29, 48, 49, 50, 51, 52, 54, 159, 160, 161, 162, 163, 164, 165, 166, 168, 170, 173, 176, 179, 180, 181, 186
 Leahy, D., 11, 12
 Lear Corporation, 79, 166
 leverage, 132, 137, 152
 LG Electronic, 65
 Lin, P., 12, 19, 163
 Lipsey, R. E., 25, 47
 Little, J. S., 22, 24, 45, 154
 local economic factors, 1, 2, 19, 40, 133
 local industry, 8
 local market, 5, 24, 46, 154, 157
 localization, 4, 6, 12, 296, 297
 location choices, 2, 3, 4, 11, 16, 17, 19, 21, 22, 28, 38, 40, 48, 50, 51, 53, 54, 133, 160, 183, 187
 location determinants, 2
 location of foreign firms, 24, 28, 35, 54, 157
 location patterns, 20, 29, 48, 49, 52, 101, 102, 160, 161, 184
 locational decisions, 2
 locational factors, 2, 39, 44
 Łódzkie, 33, 34, 60, 61, 63, 65, 66, 67, 68, 70, 71, 72, 73, 74, 75, 76, 77, 78, 80, 82, 83, 89, 91, 95, 96, 97, 100, 104, 105, 106, 108, 109, 110, 111, 112, 113, 114, 115, 116, 120, 123, 124, 126, 127, 128, 129, 130, 131, 132, 134, 135, 136, 137, 140, 142, 143, 144, 145, 146, 147, 148, 149, 150, 152, 153, 154, 155, 156, 173, 175, 176, 193, 208, 265, 266, 281
 lower entry cost, 49
 Lubelskie, 62, 71, 75, 86, 114, 135, 138, 144, 146, 148, 176, 181, 184
 Lubuskie, 55, 65, 92, 95, 114, 116, 125, 132, 134, 142, 150, 155, 157, 176, 178, 181
 Lucent Technologies, 173
 Lucent Technologies Network Systems
 Netherlands, 163
 Lundvall, B. A., 9, 185
 Luxemburg, 104

- Malecki, E., 15, 23, 152
- Małopolskie, 33, 34, 55, 59, 60, 61, 67, 68, 71, 73, 74, 75, 76, 77, 78, 80, 81, 83, 84, 85, 86, 87, 89, 94, 95, 96, 100, 105, 108, 109, 110, 111, 112, 113, 114, 115, 117, 118, 120, 121, 126, 127, 128, 129, 130, 131, 134, 135, 136, 138, 140, 142, 145, 146, 148, 149, 150, 151, 152, 154, 155, 181, 196, 211, 282
- manufacture of chemicals and chemical products, 100, 114, 116, 128, 134, 141, 143, 145, 148, 150, 162, 168
- manufacture of electrical machinery, 64, 112, 118, 125, 134, 141, 145, 148, 156, 163, 164, 166
- manufacture of fabrics and textiles, 114, 116, 135, 137, 141, 142, 143, 145, 148, 152, 165
- manufacture of food, drinks and tobacco, 100, 114, 125, 128, 131, 155, 165, 166
- manufacture of furniture and consumer goods, 142, 146, 148
- manufacture of glass, 97, 99, 135, 142, 146, 168
- manufacture of leather and leather products, 92, 135, 142, 144, 146, 149, 178
- manufacture of machinery and equipment, 69, 131, 135, 142, 146, 149, 163, 170
- manufacture of metals and metal products, 71, 110, 114, 125, 128, 131, 135, 142, 146, 149
- manufacture of other non-metal goods, 71, 112, 114, 128, 135, 146, 149, 165
- manufacture of pharmaceuticals, 60, 135, 142, 146, 149, 150, 155, 166
- manufacture of pulp and paper, 75, 110, 112, 114, 122, 125, 136, 142, 144, 146, 149
- manufacture of radio, television and communication equipment and apparatus, 122, 142
- manufacture of rubber and plastics, 100, 116, 118, 136, 142, 146, 149
- manufacture of transport equipment, 69, 71, 75, 81, 100, 116, 125, 131, 134, 142, 144, 146, 149, 157, 163, 166
- manufacture of wood and wooden products, 136
- manufacturing, 13, 15, 62, 100, 137, 138, 158, 165, 178, 188
- Mariotti, S., 22, 24, 28, 45, 153
- market share, 11, 20, 102
- market size, 9, 21, 23, 24, 46, 137, 145, 152, 154, 164, 257
- Marshall, A., 2, 5, 6, 13, 24, 46, 54, 102, 157
- Martin, R., 50, 161, 164, 165
- Mazowieckie, 34, 58, 60, 62, 75, 79, 84, 86, 92, 95, 99, 101, 107, 110, 114, 116, 122, 125, 131, 142, 143, 144, 146, 147, 152, 153, 157, 158, 161, 162, 165, 180, 186
- metal and metal products, 55, 71, 100, 131, 139
- mining and quarrying, 44, 55, 86, 94, 95, 138, 192, 197, 198, 199, 202, 226, 231, 235, 236, 237, 238, 239, 240, 244, 249, 253, 260, 261, 272, 279, 285
- MNCs, 5, 6, 16, 18, 21, 22, 23, 47, 49, 165, 183, 187, 190, 293, 294
- multinational firms, 3, 8, 18, 49, 183, 188, 190, 295, 298
- Mutinelli, M., 7
- Nationwide Global Holdings, 162
- Nelson, R. R., 7
- Netherlands, 104, 118, 132, 163, 166, 173, 178
- Nomenclature of Territorial Statistics, 30
- Norway, 104, 122
- Opolskie, 55, 71, 107, 114, 138, 141, 142, 143, 144, 147, 176, 178
- other community, social and personal service activities, 95, 136, 142, 147
- ownership, 8
- PAIIZ report, 60, 64, 66, 69, 81, 92
- panel data, 3, 33, 34, 35, 42, 290

- path-dependence, 17
 Pavlínek, P., 25
 PepsiCo, 173, 176
 petroleum products, retail trade, 97, 98, 99
 Philips, 65
 Pitelis, N. Ch., 164
 PKD classes, 58, 71, 97, 98, 100, 101, 107, 116, 118, 137, 138, 139, 154, 157, 158, 162, 166, 176, 179, 180
 Podkarpackie, 71, 79, 81, 97, 98, 99, 100, 110, 112, 129, 131, 132, 135, 138, 140, 142, 144, 145, 147, 154, 157, 166, 169, 181, 184
 Podlaskie, 55, 60, 65, 66, 84, 100, 134, 135, 138, 142, 144, 149, 157
 Polish Classification of Activity, 31, 32
 Polish Information and Foreign Investment Agency, 29
 Pomorskie, 55, 60, 64, 79, 86, 92, 110, 112, 125, 129, 131, 134, 136, 139, 140, 142, 145, 148, 170
 Porter, M., 2, 4, 6, 14, 17, 22, 23, 46, 152, 155
 powiats, 11
 Praxir, Inc., 162
 Procter & Gamble Mexico Holding, 162
 productivity, 10, 16, 17, 22, 25, 42, 44, 47, 140, 152
 profit, 12
 property rights, 20

 quality of labor, 22, 24, 45

 R&D activity, 21, 47
 R&D spending, 47, 155, 156, 158, 261
 real estate, rental, and business activities, 118, 128, 131, 136, 142, 147, 150
 regional economic factors, 2, 27, 40, 48, 133
 regional industrial specializations, 40
 regional strengths, 27, 128, 157
 repair of motor vehicles, 83, 84, 136, 147, 150, 151, 155, 162
 revealed location advantage, 41
 Revealed Location Advantage for a country-of-origin (RLAco), 36
 Revealed Technological Advantage (RTA), 36
 risk aversion, 11, 18, 49
 RLA index, 32, 35
 RLAco – Country-of-origin index, 37
 RLais – Regional Industrial Specialization index, 36

 Sampson, R. C., 32
 Sara Lee D/E N.V, 178
 Saxenian, A., 5
 Scaperlanda, A., 9, 16
 Shaver, J. M., 5, 8, 18, 21, 49, 101, 157, 159, 163, 181
 skill availability, 24, 45, 143
 skilled labor, 12, 14, 15, 17, 18, 62, 81, 97, 98, 133, 154, 157, 158, 163, 181, 186, 187, 190, 245, 249, 253
 skilled workforce, 5, 46, 55, 98, 99, 143, 144, 153, 186
 Śląskie, 34, 64, 71, 75, 79, 88, 92, 95, 101, 110, 112, 114, 116, 118, 125, 128, 131, 132, 134, 139, 142, 143, 148, 149, 153, 157, 170, 172
 small and medium enterprises (SMEs), 29
 Smith, A., 4
 Smith, D. F., 14, 46
 Soete, L., 9, 36, 185
 southwestern trajectory of concentration, 101, 184
 Spain, 131, 153, 186
 special economic zones, 26
 spillovers, 6, 13, 16, 25, 187
 Storper, M., 6
 sub-region, 29, 290
 supply chain, 81
 Sweden, 104, 122, 125, 165, 176
 Świętokrzyskie, 55, 60, 66, 71, 135, 136, 139, 142, 144, 146, 148, 152, 156, 184
 Switzerland, 104, 125, 128, 166

 tacit capabilities, 12, 14, 18
 Tang, H., 88
 technological capability, 7, 18, 25, 42, 50, 161, 165
 technological change, 10, 15

- technological specialization, 8, 10, 16, 19, 21, 50, 101, 156, 161
 trade and repair, 136, 142, 147, 150, 163
 trajectory development, 15, 27, 100, 133
 transition economy, 28, 51, 159
 transport, storage, and communication, 81, 83, 84, 128
 Turkey, 131

 UK, 10, 21, 103, 128, 189
 Unisys Corporation, 162
 United Technologies Holding S. A., 79, 166
 upstream, 4, 13, 14

 Venables, A. J., 14, 46
 Vernon, R., 9, 16
 Visteon Automotive Systems, 178
 voivodships, 11, 29, 30, 31, 40, 41, 62, 64, 75, 290

 wage level, 145
 Warmińsko-Mazurskie, 33, 34, 55, 59, 60, 67, 68, 70, 72, 74, 76, 77, 82, 85, 86, 96, 97, 100, 105, 106, 108, 109, 111, 113, 114, 115, 120, 127, 130, 133, 134, 135, 139, 140, 142, 143, 144, 147, 184, 203, 217
 Weber, A., 8, 44, 156
 Wells, L. T., 9, 16
 Western European markets, 33, 101
 Wheeler, D., 8, 16, 17, 18, 101, 157
 wholesale and retail trade, 100, 114, 116, 118, 122, 136, 138, 147, 150, 162
 Wielkopolskie, 34, 60, 62, 64, 65, 69, 71, 75, 79, 84, 92, 95, 97, 100, 101, 107, 110, 112, 114, 118, 122, 125, 128, 131, 132, 134, 136, 139, 140, 142, 143, 144, 147, 149, 150, 153, 155, 166, 168, 180, 181
 Wm. Wrigley Jr. Company, 166
 województwo, 30, 41, 290
 wood and wooden products, 55, 86, 93, 136

 Xerox Ltd., 162

 Zachodnio-Pomorskie, 55, 60, 64, 69, 92, 100, 110, 114, 118, 122, 125, 132, 134, 135, 139, 142, 144, 145, 148, 149, 150, 151, 156, 184
 Zhao, C., 9