Online Appendix

Artificial Intelligence along Supply Chains:
Evidence from AI Talent Diffusion

This Online Appendix consists of two parts.

Part I (Tables OA1–OA16) collects the supplementary analyses referenced in the main text.

Part II (Tables OA17–OA27) reports the *full-controls* versions of the regression tables that appear in the main text and in the Appendix. Because of page limitations, all regression tables other than Tables 1–3 of the main text suppress the coefficient estimates on the control variables and report them only as "Controls: Yes." The tables in Part II reproduce exactly the same specifications, samples, and fixed effects, and additionally report the estimated coefficient and standard error for every control variable. The heading of each table in Part II indicates, in parentheses, the table in the main text or in the Appendix to which it corresponds.

Part I. Supplementary Analyses Referenced in the Main Text

Table OA1 Diffusion of AI Adoption along Supply Chains: Manufacturing, Service, and Other Industries

Variables	(1) Manufacturing Industry (SIC 2000–3999)	(2) Service Industry (SIC 7000–8999)	(3) Other Industries
$AI_Emp^c_{t-1}$	0.001**	0.001***	0.005***
	(0.001)	(0.000)	(0.000)
$LogAsset^s_t$	−0.058	0.992***	0.291
	(0.151)	(0.088)	(0.179)
ROA^s_t	0.186	0.163	−0.390**
	(0.166)	(0.162)	(0.153)
$SalesGrowth^s_t$	0.079***	0.244**	0.055
	(0.024)	(0.087)	(0.057)
$LogAge^s_t$	−2.224	3.500***	0.194
	(1.391)	(0.683)	(0.677)
$LogAsset^c_t$	0.303	−0.045	0.594
	(0.453)	(0.194)	(0.587)
ROA^c_t	−0.603	1.053**	−0.110
	(0.937)	(0.436)	(0.621)
$SalesGrowth^c_t$	−0.029	−0.542**	−0.013
	(0.148)	(0.164)	(0.140)
$LogAge^c_t$	−0.053	−3.050**	0.135
	(0.621)	(0.970)	(1.235)
Observations	13,653	2,870	4,026
R^2	0.729	0.770	0.713

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA2 Robustness Check: Excluding AI-Intensive Sectors (Software, SIC 737x, and Consulting, SIC 874x)

Variables	(1) Exclude AI Supplier Industry $AI_Emp^s_t$	(2) Exclude AI Customer Industry $AI_Emp^s_t$	(3) Exclude for Both $AI_Emp^s_t$
$AI_Emp^c_{t-1}$	0.001***	0.002***	0.002**
	(0.001)	(0.001)	(0.001)
$LogAsset^s_t$	0.105	0.116	0.103
	(0.140)	(0.144)	(0.137)
ROA^s_t	0.070	0.099	0.064
	(0.142)	(0.136)	(0.141)
$SalesGrowth^s_t$	0.055*	0.069**	0.048*
	(0.029)	(0.032)	(0.028)
$LogAge^s_t$	−1.754	−1.083	−1.700
	(1.098)	(1.315)	(1.126)
$LogAsset^c_t$	0.392	0.373	0.371
	(0.366)	(0.342)	(0.385)
ROA^c_t	−0.400	−0.395	−0.425
	(0.765)	(0.702)	(0.781)
$SalesGrowth^c_t$	−0.170	−0.177*	−0.146
	(0.105)	(0.102)	(0.098)
$LogAge^c_t$	−0.561	−1.119*	−1.025*
	(0.469)	(0.565)	(0.540)
CS Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	18,425	19,817	18,119
R^2	0.725	0.728	0.723

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA3 Robustness Check: Additional Controls for Employee Churn (Departure Ratio: Number of AI Employees Leaving the Firm Divided by the Total Number of AI Employees)

Variables	(1) Industry-Level Churn Controls $AI_Emp_t^s$	(2) Firm-Level Churn Controls $AI_Emp_t^s$
$AI_Emp_{t-1}^c$	0.001***	0.001***
	(0.000)	(0.000)
$LogAsset_t^s$	0.149	0.127
	(0.158)	(0.151)
ROA_t^s	0.093	0.142
	(0.130)	(0.131)
$SalesGrowth_t^s$	0.069**	0.071**
	(0.030)	(0.029)
$LogAge_t^s$	−1.030	−1.007
	(1.328)	(1.308)
$LogAsset_t^c$	0.415	0.418
	(0.325)	(0.323)
ROA_t^c	−0.287	−0.370
	(0.697)	(0.639)
$SalesGrowth_t^c$	−0.211*	−0.199*
	(0.111)	(0.110)
$LogAge_t^c$	−0.593	−0.551
	(0.465)	(0.454)
$DepartRatio_t^{SupInd}$	0.164	
	(0.324)	
$DepartRatio_t^{CusInd}$	0.207	
	(0.409)	
$DepartRatio_t^s$		2.099***
		(0.478)
$DepartRatio_t^c$		0.060
		(0.085)
CS Pair FE	Yes	Yes
Year FE	Yes	Yes
Observations	20,549	20,549
R^2	0.731	0.736

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA4 Comparison of Employee Churn Rate between Customers and Suppliers

Variable	Observations	Mean	Std. Error	Std. Dev.
Supplier Employee Departure Rate	22,352	0.1367	0.0012	0.1773
Customer Employee Departure Rate	22,352	0.1382	0.0010	0.1497
Difference (Supplier − Customer)	22,352	−0.0016	0.0014	0.2141

Table OA5 Robustness Check Based on Information Extracted from Job Postings and 10-K Filings

Panel A. Job Posting Measure of AI Adoption

Variables	(1) $AI_Posting^s_t$	(2) $AI_Posting^s_t$	(3) $AI_Posting^s_t$
$AI_Posting^c_{t-1}$	0.002**		
	(0.001)		
$HasAI^c_{t-1}$		0.277**	
		(0.129)	
$Log(1+AI_Posting^c_{t-1})$			0.257***
			(0.069)
$LogAsset^s_t$	0.352***	0.344***	0.330***
	(0.085)	(0.087)	(0.080)
ROA^s_t	0.355	0.341	0.354*
	(0.215)	(0.212)	(0.211)
$SalesGrowth^s_t$	−0.053	−0.042	−0.049
	(0.035)	(0.034)	(0.035)
$LogAge^s_t$	−1.839***	−1.819***	−1.709***
	(0.617)	(0.605)	(0.629)
$LogAsset^c_t$	0.302	0.386	0.352
	(0.307)	(0.327)	(0.313)
ROA^c_t	−0.037	0.003	0.030
	(0.763)	(0.806)	(0.762)
$SalesGrowth^c_t$	−0.281**	−0.252*	−0.230*
	(0.140)	(0.141)	(0.125)
$LogAge^c_t$	0.108	−0.110	0.658
	(0.661)	(0.634)	(0.683)
CS Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	17,468	17,468	17,468
R^2	0.554	0.552	0.554

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Panel B. AI Measures from 10-K Filings

Variables	(1) $AI_10K^s_t$	(2) $AI_10K^s_t$	(3) $AI_10K^s_t$
$AI_10K^c_{t-1}$	0.083***		
	(0.014)		
$HasAI^c_{t-1}$		0.170***	
		(0.048)	
$Log(1+AI_10K^c_{t-1})$			0.212***
			(0.045)
$LogAsset^s_t$	−0.042	−0.040	−0.040
	(0.051)	(0.049)	(0.050)
ROA^s_t	0.038	0.038	0.038
	(0.072)	(0.073)	(0.072)
$SalesGrowth^s_t$	0.046***	0.047***	0.046***
	(0.014)	(0.014)	(0.014)
$LogAge^s_t$	0.627**	0.639**	0.632**
	(0.260)	(0.266)	(0.261)
$LogAsset^c_t$	0.012	0.026	0.011
	(0.058)	(0.054)	(0.058)
ROA^c_t	0.144	0.172	0.152
	(0.288)	(0.282)	(0.286)
$SalesGrowth^c_t$	−0.037	−0.049	−0.040
	(0.055)	(0.057)	(0.056)
$LogAge^c_t$	−0.043	−0.029	−0.039
	(0.173)	(0.181)	(0.175)
CS Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	20,549	20,549	20,549
R^2	0.765	0.764	0.765

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA6 Selection of Dependent Suppliers

Variables	(1)	(2)	(3)	(4)
	$Selected^s_t$			
$AI_Emp^s_{t-1}$	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
$LogAsset^s_{t-1}$	−0.002***	−0.001***	−0.002***	−0.002***
	(0.000)	(0.000)	(0.001)	(0.000)
ROA^s_{t-1}		−0.002	−0.002	−0.001
		(0.002)	(0.002)	(0.002)
$SalesGrowth^s_{t-1}$			0.002***	0.002**
			(0.001)	(0.001)
$LnAge^s_{t-1}$				−0.001
				(0.001)
SIC2 FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	41,099	41,099	38,504	38,504
R^2	0.020	0.020	0.021	0.021

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA7 AI Diffusion from Suppliers to Customers

Variables	(1) $AI_Emp^c_t$	(2) $AI_Emp^c_t$	(3) $AI_Emp^c_t$
$AI_Emp^s_{t-1}$	5.160		
	(4.032)		
$HasAI^s_{t-1}$		8.841	
		(9.967)	
$Log(1+AI_Emp^s_{t-1})$			29.349
			(21.917)
$LogAsset^s_t$	−3.002	−2.780	−3.355
	(12.166)	(12.130)	(11.986)
ROA^s_t	−4.358	−4.086	−3.355
	(8.215)	(8.744)	(8.606)
$SalesGrowth^s_t$	1.775	1.980	1.815
	(1.836)	(1.821)	(1.852)
$LogAge^s_t$	45.419	42.563	44.086
	(32.764)	(33.070)	(32.269)
$LogAsset^c_t$	113.348	115.283	114.320
	(86.882)	(86.765)	(87.095)
ROA^c_t	117.999	117.816	116.838
	(84.368)	(84.895)	(84.023)
$SalesGrowth^c_t$	−36.928	−37.981	−37.061
	(24.263)	(24.715)	(24.457)
$LogAge^c_t$	−143.098**	−144.442**	−142.560**
	(63.359)	(63.336)	(63.220)
CS Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	20,549	20,549	20,549
R^2	0.840	0.839	0.840

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA8 Ratio of AI LCA Filings to AI Workforce

Panel A. Average LCA-to-Employment Ratio

Occupation Category	Average LCA-to-Employment Ratio
AI	0.595
Software Development	0.144
Traditional Automation	0.091

Panel B. Average Foreign Worker-to-Employment Ratio

Occupation Category	Average Foreign Worker-to-Employment Ratio
AI	0.515
Software Development	0.320
Traditional Automation	0.358

Table OA9 Robustness Check of the H-1B Instrument: Parallel Trends

Variables	(1) $AI_Emp^c_{t-2}$	(2) $AI_Emp^c_{t-3}$	(3) $AI_Emp^c_{t-4}$
$H1B_Surprise^c_{t-1}$	0.374	0.258	0.094
	(0.271)	(0.230)	(0.192)
$LogAsset^s_t$	9.325	8.358	6.003
	(10.461)	(8.560)	(7.054)
ROA^s_t	−6.976	−9.342	−8.058
	(8.424)	(6.666)	(5.949)
$SalesGrowth^s_t$	2.280	2.856	3.025
	(1.810)	(1.761)	(1.924)
$LogAge^s_t$	38.934	36.548	37.409
	(51.991)	(48.699)	(46.318)
$LogAsset^c_t$	25.572	19.261	17.973
	(24.151)	(20.384)	(18.884)
ROA^c_t	271.634**	233.787**	174.639**
	(119.908)	(99.939)	(77.297)
$SalesGrowth^c_t$	−35.523	−34.664	−29.105
	(24.189)	(22.702)	(19.814)
$LogAge^c_t$	−127.658***	−108.828***	−87.322***
	(39.582)	(33.798)	(30.468)
CS Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	9,137	8,400	7,695
R^2	0.680	0.653	0.622

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA10 Robustness of the H-1B Test: Including Supplier's Own H-1B Lottery Surprise as a Control

Variables	(1) $AI_Emp^c_{t-1}$	(2) $AI_Emp^s_t$
$H1B_Surprise^c_{t-1}$	0.782***	
	(0.158)	
$AI_Emp^c_{t-1}$		0.004**
		(0.002)
$H1B_Surprise^s_{t-1}$	0.351	0.027*
	(0.714)	(0.014)
$LogAsset^s_t$	36.642	−0.238
	(27.516)	(0.287)
ROA^s_t	12.342	0.958
	(22.714)	(0.574)
$SalesGrowth^s_t$	0.423	0.317***
	(6.051)	(0.064)
$LogAge^s_t$	152.808*	−1.661
	(88.994)	(1.919)
$LogAsset^c_t$	45.505	0.496
	(30.354)	(0.415)
ROA^c_t	196.492	−2.988**
	(196.416)	(1.237)
$SalesGrowth^c_t$	1.000	−0.319
	(23.947)	(0.434)
$LogAge^c_t$	−260.260***	1.476
	(94.499)	(2.240)
Cragg-Donald Wald F statistic	287.131	
Observations	3,737	3,737
R^2	0.783	0.014

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA11 AI Work Categorization

Original Cluster Name	Meta-Cluster	Type ID
Sentiment Analysis Monitoring	Consumer & Product Intelligence	1
Personalized Recommendation Engines	Consumer & Product Intelligence	1
Customer Journey Optimization	Consumer & Product Intelligence	1
Product Development Management	Consumer & Product Intelligence	1
Search Relevance Optimization	Consumer & Product Intelligence	1
Natural Language Processing	Data Engineering & IT Security	2
Data Pipeline Management	Data Engineering & IT Security	2
Business Intelligence Visualization	Data Engineering & IT Security	2
Cybersecurity Infrastructure Management	Data Engineering & IT Security	2
Data Quality Management	Data Engineering & IT Security	2
Model Performance Optimization	Data Engineering & IT Security	2
Financial Investment Analysis	Financial & Regulatory Intelligence	3
Regulatory Compliance Automation	Financial & Regulatory Intelligence	3
Predictive Fraud Detection	Financial & Regulatory Intelligence	3
Complex Problem Solving	Operational Process Automation	4
Workflow Optimization	Operational Process Automation	4
Task Automation Workflows	Operational Process Automation	4
Predictive Maintenance Systems	Operational Process Automation	4
Computer Vision Recognition	Physical & Visual Perception	5
Autonomous Navigation Systems	Physical & Visual Perception	5

Table OA12 Robustness Check: AI Classifications Based on Job Postings and 10-K Filings

Panel A. AI Classifications Based on Job Postings

Variables	(1) $AI_Posting1^s_t$	(2) $AI_Posting2^s_t$	(3) $AI_Posting3^s_t$	(4) $AI_Posting4^s_t$	(5) $AI_Posting5^s_t$
$AI_Posting1^c_{t-1}$	0.002**				
	(0.001)				
$Residual_Type1^c_{t-1}$	0.002				
	(0.003)				
$AI_Posting2^c_{t-1}$		0.002**			
		(0.001)			
$Residual_Type2^c_{t-1}$		−0.005			
		(0.021)			
$AI_Posting3^c_{t-1}$			0.002**		
			(0.001)		
$Residual_Type3^c_{t-1}$			−0.000		
			(0.001)		
$AI_Posting4^c_{t-1}$				0.002**	
				(0.001)	
$Residual_Type4^c_{t-1}$				0.006	
				(0.008)	
$AI_Posting5^c_{t-1}$					0.001*
					(0.000)
$Residual_Type5^c_{t-1}$					0.000
					(0.000)
$LogAsset^s_t$	0.264***	1.261***	0.059	0.548***	0.065***
	(0.069)	(0.284)	(0.045)	(0.142)	(0.019)
ROA^s_t	0.408**	1.265*	0.103	0.554	−0.033
	(0.186)	(0.725)	(0.074)	(0.350)	(0.027)
$SalesGrowth^s_t$	−0.041*	−0.228*	−0.009	−0.089	−0.002
	(0.024)	(0.128)	(0.014)	(0.061)	(0.006)
$LogAge^s_t$	−1.346***	−6.354***	−0.647***	−3.101***	−0.294***
	(0.475)	(2.144)	(0.226)	(1.000)	(0.110)
$LogAsset^c_t$	0.311	0.924	0.128	0.402	−0.022
	(0.285)	(1.054)	(0.111)	(0.514)	(0.048)
ROA^c_t	−0.001	0.727	0.180	0.158	0.082
	(0.629)	(2.899)	(0.338)	(1.310)	(0.095)
$SalesGrowth^c_t$	−0.270**	−1.060**	−0.141***	−0.408	−0.031
	(0.128)	(0.469)	(0.047)	(0.247)	(0.021)
$LogAge^c_t$	0.563	0.418	−0.123	0.150	−0.002
	(0.574)	(2.498)	(0.280)	(1.110)	(0.085)
CS Pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Observations	17,468	17,468	17,468	17,468	17,468
R^2	0.545	0.546	0.494	0.542	0.506

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Panel B. AI Classifications Based on 10-K Filings

Variables	(1) $AI_10K1^s_t$	(2) $AI_10K2^s_t$	(3) $AI_10K4^s_t$
$AI_10K1^c_{t-1}$	0.020***		
	(0.006)		
$Residual_Type1^c_{t-1}$	0.002		
	(0.003)		
$AI_10K2^c_{t-1}$		0.022**	
		(0.010)	
$Residual_Type2^c_{t-1}$		0.024	
		(0.018)	
$AI_10K4^c_{t-1}$			0.021***
			(0.007)
$Residual_Type4^c_{t-1}$			0.009
			(0.006)
$LogAsset^s_t$	−0.000	0.004	0.010
	(0.006)	(0.037)	(0.014)
ROA^s_t	0.005	−0.002	0.024
	(0.008)	(0.057)	(0.020)
$SalesGrowth^s_t$	0.005*	0.030***	0.006*
	(0.003)	(0.010)	(0.003)
$LogAge^s_t$	0.052	0.366**	0.115
	(0.034)	(0.160)	(0.069)
$LogAsset^c_t$	−0.002	−0.034	−0.002
	(0.008)	(0.036)	(0.015)
ROA^c_t	0.002	0.407***	0.056
	(0.019)	(0.141)	(0.040)
$SalesGrowth^c_t$	−0.004	−0.001	0.016
	(0.005)	(0.039)	(0.020)
$LogAge^c_t$	0.002	−0.028	0.036
	(0.023)	(0.161)	(0.069)
CS Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	20,549	20,549	20,549
R^2	0.607	0.669	0.647

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA13 Diffusion of AI Adoption along Supply Chains: Relationship Specificity and Learning

Variables	(1) $AI_Emp^s_t$	(2) $AI_Emp^s_t$	(3) $AI_Emp^s_t$
$AI_Emp^c_{t-1} \times DumCite$	0.003***		
	(0.001)		
$DumCite$	−0.350***		
	(0.102)		
$AI_Emp^c_{t-1} \times DumR\&D$		0.003***	
		(0.001)	
$DumR\&D$		−0.111	
		(0.159)	
$AI_Emp^c_{t-1} \times DumPartner$			0.012**
			(0.005)
$DumPartner$			−0.223
			(0.177)
$AI_Emp^c_{t-1}$	0.000	−0.002***	0.001***
	(0.000)	(0.000)	(0.000)
$LogAsset^s_t$	0.136	0.122	0.147
	(0.152)	(0.153)	(0.157)
ROA^s_t	0.094	0.105	0.089
	(0.130)	(0.127)	(0.131)
$SalesGrowth^s_t$	0.072**	0.074**	0.071**
	(0.029)	(0.031)	(0.030)
$LogAge^s_t$	−1.034	−1.064	−1.032
	(1.320)	(1.318)	(1.328)
$LogAsset^c_t$	0.458	0.442	0.410
	(0.308)	(0.326)	(0.325)
ROA^c_t	−0.329	−0.364	−0.296
	(0.690)	(0.675)	(0.688)
$SalesGrowth^c_t$	−0.203*	−0.215*	−0.213*
	(0.110)	(0.113)	(0.114)
$LogAge^c_t$	−0.602	−0.624	−0.601
	(0.481)	(0.481)	(0.471)
CS Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	20,549	20,549	20,549
R^2	0.734	0.733	0.731

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA14 Diffusion of AI Adoption along Supply Chains: Geographic Distance

Variables	(1) $LongDistance$ $AI_Emp^s_t$	(2) $ShortDistance$ $AI_Emp^s_t$
$AI_Emp^c_{t-1}$	0.000	0.003***
	(0.001)	(0.001)
$LogAsset^s_t$	0.288	0.019
	(0.203)	(0.153)
ROA^s_t	0.041	0.208
	(0.168)	(0.219)
$SalesGrowth^s_t$	0.066**	0.048
	(0.030)	(0.038)
$LogAge^s_t$	−0.847	−1.700
	(1.478)	(1.048)
$LogAsset^c_t$	0.450	0.544
	(0.326)	(0.515)
ROA^c_t	−0.197	−0.243
	(0.409)	(1.392)
$SalesGrowth^c_t$	−0.167	−0.197
	(0.109)	(0.176)
$LogAge^c_t$	−2.180**	1.189
	(0.814)	(0.807)
Difference	−0.003**	
CS Pair FE	Yes	Yes
Year FE	Yes	Yes
Observations	11,186	9,235
R^2	0.740	0.762

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA15 Robustness of the Relocation Test: Parallel Trends

Variables	(1) $AI_Emp^s_{t-1}$	(2) $AI_Emp^s_{t-2}$	(3) $AI_Emp^s_{t-3}$	(4) $AI_Emp^s_{t-4}$
$MoveEffect^c_t \times AI_Emp^c_{t-1}$	−0.014	−0.013	−0.010	−0.008
	(0.008)	(0.008)	(0.006)	(0.005)
$MoveEffect^c_t$	0.102	0.132	0.095	0.095
	(0.084)	(0.111)	(0.116)	(0.114)
$AI_Emp^c_{t-1}$	0.003***	0.003***	0.002***	0.002***
	(0.001)	(0.001)	(0.001)	(0.001)
$LogAsset^s_t$	−0.234	−0.328	−0.359	−0.357
	(0.564)	(0.554)	(0.488)	(0.438)
ROA^s_t	−0.348	−0.969	−1.107	−1.014
	(0.506)	(0.954)	(1.156)	(1.138)
$SalesGrowth^s_t$	−0.167	−0.160	−0.166	−0.124
	(0.342)	(0.325)	(0.307)	(0.232)
$LogAge^s_t$	−10.236	−9.122	−7.554	−5.778
	(8.264)	(7.410)	(6.231)	(4.762)
$LogAsset^c_t$	−6.260	−6.178	−5.700	−4.882
	(5.644)	(5.423)	(5.016)	(4.331)
ROA^c_t	6.028	6.686	6.150	5.054
	(5.754)	(6.726)	(6.016)	(5.075)
$SalesGrowth^c_t$	0.585	0.332	0.320	−0.233
	(1.062)	(0.692)	(0.658)	(0.277)
$LogAge^c_t$	0.402	0.246	0.130	−0.164
	(2.334)	(2.088)	(1.865)	(1.523)
CS Pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	20,549	19,036	17,468	15,866
R^2	0.605	0.587	0.574	0.565

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA16 Robustness Check of the Relocation Test: Cross-State Relocations Only

Variables	(1) $AI_Emp^s_t$	(2) $AI_Emp^s_t$
$MoveEffect^c_{t-1} \times AI_Emp^c_{t-1}$	−0.004***	−0.004***
	(0.001)	(0.001)
$MoveEffect^c_{t-1}$	0.033***	0.037***
	(0.011)	(0.013)
$AI_Emp^c_{t-1}$	0.001***	0.001***
	(0.000)	(0.000)
$LogAsset^s_t$		0.147
		(0.157)
ROA^s_t		0.091
		(0.131)
$SalesGrowth^s_t$		0.071**
		(0.030)
$LogAge^s_t$		−1.035
		(1.329)
$LogAsset^c_t$		0.414
		(0.325)
ROA^c_t		−0.295
		(0.686)
$SalesGrowth^c_t$		−0.213*
		(0.114)
$LogAge^c_t$		−0.605
		(0.470)
CS Pair FE	Yes	Yes
Year FE	Yes	Yes
Observations	20,745	20,549
R^2	0.730	0.731

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Part II. Full-Controls Versions of the Tables Reported in the Main Text and the Appendix

The tables in this part report the complete estimation output for the regression tables of the main text (Tables 4–9) and of the Appendix (Tables A4–A8), in which the coefficient estimates on the control variables are suppressed and summarized as "Controls: Yes" because of page limitations. Tables 1–3 of the main text already report all control variables and are therefore not reproduced here; Tables A1–A3 of the Appendix (variable definitions, AI-related keywords, and examples of AI employee profiles) contain no regression estimates. The specifications, samples, fixed effects, and standard-error clustering in this part are identical to those in the corresponding tables; the only difference is that every control variable is displayed.

Table OA17 Economic Mechanisms of AI Diffusion along Supply Chains: Learning or Catering (Full-Controls Version of Table 4 in the Main Text)

Variables	(1) $AI_Emp_t^s$	(2) $AI_Emp_t^s$
$Size_Ratio_t^{s,c} \times AI_Emp_{t-1}^c$	−0.003***	
	(0.001)	
$Size_Ratio_t^{s,c}$	1.123***	
	(0.266)	
$Pct_COGS_t^{s,c} \times AI_Emp_{t-1}^c$		0.146***
		(0.046)
$Pct_COGS_t^{s,c}$		0.000
		(0.001)
$AI_Emp_{t-1}^c$	0.007***	0.001
	(0.002)	(0.001)
$LogAsset_t^s$	0.382**	0.068
	(0.186)	(0.117)
ROA_t^s	0.189	0.101
	(0.139)	(0.168)
$SalesGrowth_t^s$	0.072**	0.042
	(0.031)	(0.035)
$LogAge_t^s$	−0.964	−1.627
	(1.335)	(1.178)
$LogAsset_t^c$	0.331	0.376
	(0.334)	(0.308)
ROA_t^c	−0.345	−0.251
	(0.682)	(0.752)
$SalesGrowth_t^c$	−0.227*	−0.146
	(0.114)	(0.141)
$LogAge_t^c$	−0.579	−1.334**
	(0.484)	(0.531)
CS Pair FE	Yes	Yes
Year FE	Yes	Yes
Observations	20,549	13,574
R^2	0.735	0.745

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA18 Diffusion of AI Adoption along Supply Chains: Categories of AI Applications (Full-Controls Version of Table 5 in the Main Text)

Panel A. Within-Category Diffusion

Variables	(1) $AI_Emp1^s_t$	(2) $AI_Emp2^s_t$	(3) $AI_Emp3^s_t$	(4) $AI_Emp4^s_t$	(5) $AI_Emp5^s_t$
$AI_Emp1^c_{t-1}$	0.001**				
	(0.001)				
$AI_Emp2^c_{t-1}$		0.001**			
		(0.000)			
$AI_Emp3^c_{t-1}$			0.001**		
			(0.001)		
$AI_Emp4^c_{t-1}$				0.002***	
				(0.001)	
$AI_Emp5^c_{t-1}$					0.002**
					(0.001)
$LogAsset^s_t$	0.026	0.025	0.023**	0.031	−0.009
	(0.043)	(0.066)	(0.011)	(0.042)	(0.023)
ROA^s_t	0.011	0.065*	−0.014	0.023	0.046*
	(0.027)	(0.036)	(0.018)	(0.042)	(0.024)
$SalesGrowth^s_t$	0.009*	0.026**	0.005*	0.012*	0.008
	(0.005)	(0.011)	(0.002)	(0.006)	(0.006)
$LogAge^s_t$	−0.247	−0.388	−0.078	−0.343	0.075
	(0.313)	(0.488)	(0.095)	(0.290)	(0.134)
$LogAsset^c_t$	0.089	0.249*	0.038	0.100	0.019
	(0.068)	(0.130)	(0.035)	(0.083)	(0.049)
ROA^c_t	−0.008	0.069	0.038	−0.166	0.073
	(0.173)	(0.351)	(0.085)	(0.189)	(0.071)
$SalesGrowth^c_t$	−0.036	−0.115**	−0.022	−0.043	−0.041**
	(0.022)	(0.051)	(0.017)	(0.028)	(0.020)
$LogAge^c_t$	−0.001	−0.184	−0.028	−0.204	−0.138**
	(0.141)	(0.233)	(0.066)	(0.135)	(0.065)
CS Pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Observations	20,549	20,549	20,549	20,549	20,549
R^2	0.731	0.707	0.643	0.684	0.755

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Panel B. Across-Category Diffusion

Variables	(1) $AI_Emp1^s_t$	(2) $AI_Emp2^s_t$	(3) $AI_Emp3^s_t$	(4) $AI_Emp4^s_t$	(5) $AI_Emp5^s_t$
$AI_Emp1^c_{t-1}$	0.001**				
	(0.001)				
$Residual_AI1^c_{t-1}$	0.000				
	(0.000)				
$AI_Emp2^c_{t-1}$		0.001**			
		(0.000)			
$Residual_AI2^c_{t-1}$		−0.001			
		(0.001)			
$AI_Emp3^c_{t-1}$			0.001*		
			(0.001)		
$Residual_AI3^c_{t-1}$			−0.000		
			(0.000)		
$AI_Emp4^c_{t-1}$				0.002***	
				(0.001)	
$Residual_AI4^c_{t-1}$				0.000	
				(0.000)	
$AI_Emp5^c_{t-1}$					0.002**
					(0.001)
$Residual_AI5^c_{t-1}$					−0.000
					(0.000)
$LogAsset^s_t$	0.025	0.026	0.023**	0.030	−0.009
	(0.043)	(0.065)	(0.011)	(0.042)	(0.023)
ROA^s_t	0.012	0.064*	−0.014	0.023	0.046*
	(0.027)	(0.036)	(0.018)	(0.042)	(0.024)
$SalesGrowth^s_t$	0.009*	0.026**	0.005*	0.012*	0.008
	(0.005)	(0.011)	(0.002)	(0.006)	(0.006)
$LogAge^s_t$	−0.249	−0.389	−0.078	−0.341	0.076
	(0.312)	(0.488)	(0.095)	(0.291)	(0.134)
$LogAsset^c_t$	0.086	0.250*	0.039	0.097	0.020
	(0.067)	(0.130)	(0.035)	(0.083)	(0.048)
ROA^c_t	−0.021	0.085	0.039	−0.171	0.074
	(0.169)	(0.341)	(0.083)	(0.184)	(0.073)
$SalesGrowth^c_t$	−0.035	−0.116**	−0.022	−0.043	−0.041**
	(0.022)	(0.050)	(0.017)	(0.028)	(0.020)
$LogAge^c_t$	−0.003	−0.186	−0.028	−0.210	−0.137**
	(0.142)	(0.233)	(0.066)	(0.138)	(0.063)
CS Pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Observations	20,549	20,549	20,549	20,549	20,549
R^2	0.731	0.707	0.643	0.684	0.755

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% leve respectively.

Table OA19 Diffusion of AI Adoption along Supply Chains: Worker Flows from Customers to Suppliers (Full-Controls Version of Table 6 in the Main Text)

Variables	(1) *Has Move* $AI_Emp^s_t$	(2) *No Move* $AI_Emp^s_t$	(3) *Manager Move* $AI_Emp^s_t$	(4) *NoManager Move* $AI_Emp^s_t$	(5) *STEM Move* $AI_Emp^s_t$	(6) *NoSTEM Move* $AI_Emp^s_t$
$AI_Emp^c_{t-1}$	0.002**	−0.000	0.002**	0.000	0.002**	−0.000
	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)
$LogAsset^s_t$	0.071	0.120*	0.011	0.163	−0.041	0.104
	(0.292)	(0.069)	(0.303)	(0.109)	(0.349)	(0.063)
ROA^s_t	0.503	−0.291***	0.843	−0.224**	0.697	−0.235**
	(0.334)	(0.087)	(0.818)	(0.086)	(0.436)	(0.088)
$SalesGrowth^s_t$	0.134***	0.054*	0.147**	0.047*	0.116**	0.059*
	(0.035)	(0.029)	(0.056)	(0.025)	(0.044)	(0.034)
$LogAge^s_t$	−1.214	0.229	−0.886	−0.229	−1.431	0.219
	(2.049)	(0.628)	(2.654)	(0.792)	(2.581)	(0.653)
$LogAsset^c_t$	1.225*	0.082	1.017	0.287***	1.265*	0.147
	(0.619)	(0.084)	(0.799)	(0.096)	(0.677)	(0.112)
ROA^c_t	−0.131	0.026	−2.081	0.282	−0.684	0.112
	(1.347)	(0.152)	(2.591)	(0.349)	(1.616)	(0.215)
$SalesGrowth^c_t$	−0.510**	−0.104	−0.386	−0.114	−0.356	−0.062
	(0.246)	(0.097)	(0.404)	(0.091)	(0.323)	(0.073)
$LogAge^c_t$	−0.143	0.500**	1.331	0.118	−0.176	0.400
	(1.272)	(0.231)	(3.436)	(0.281)	(2.252)	(0.244)
Difference	0.002***		0.002***		0.002***	
CS Pair FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	10,084	9,864	5,619	14,533	7,336	12,696
R^2	0.745	0.784	0.770	0.758	0.756	0.769

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA20 Exogenous Shock to Geographic Distance: Customers' Headquarters Relocation (Full-Controls Version of Table 7, Panel B, in the Main Text)

Variables	(1) $AI_Emp^s_t$	(2) $AI_Emp^s_t$
$Move^c_{t-1} \times AI_Emp^c_{t-1}$	−0.004**	−0.004***
	(0.001)	(0.002)
$AI_Emp^c_{t-1}$	0.001***	0.001***
	(0.000)	(0.000)
$Move^c_{t-1}$	0.056**	0.057**
	(0.024)	(0.026)
$LogAsset^s_t$		0.147
		(0.157)
ROA^s_t		0.089
		(0.131)
$SalesGrowth^s_t$		0.071**
		(0.030)
$LogAge^s_t$		−1.034
		(1.330)
$LogAsset^c_t$		0.413
		(0.325)
ROA^c_t		−0.289
		(0.682)
$SalesGrowth^c_t$		−0.214*
		(0.113)
$LogAge^c_t$		−0.606
		(0.470)
CS Pair FE	Yes	Yes
Year FE	Yes	Yes
Observations	20,745	20,549
R^2	0.730	0.731

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA21 Diffusion of AI Adoption along Supply Chains: The Role of Data Assets (Full-Controls Version of Table 8 in the Main Text)

Variables	(1) $AI_Emp^s_t$	(2) $Software_Emp^s_t$	(3) $Automation_Emp^s_t$
$AI_Emp^c_{t-1} \times Data^s_{t-1}$	0.084***		
	(0.020)		
$AI_Emp^c_{t-1}$	0.000		
	(0.000)		
$Software_Emp^c_{t-1} \times Data^s_{t-1}$		0.145	
		(0.090)	
$Software_Emp^c_{t-1}$		0.006**	
		(0.003)	
$Automation_Emp^c_{t-1} \times Data^s_{t-1}$			0.069
			(0.255)
$Automation_Emp^c_{t-1}$			0.019***
			(0.007)
$Data^s_{t-1}$	122.148***	1,872.398***	389.189***
	(30.730)	(548.172)	(64.173)
$LogAsset^s_t$	−0.007	9.307	1.075***
	(0.124)	(7.183)	(0.343)
ROA^s_t	0.205	0.658	0.225
	(0.137)	(2.351)	(0.506)
$SalesGrowth^s_t$	0.061*	0.777	0.065
	(0.036)	(0.622)	(0.091)
$LogAge^s_t$	−0.889	10.906	−5.695***
	(0.991)	(8.766)	(1.332)
$LogAsset^c_t$	0.459	4.410	−0.736
	(0.279)	(6.900)	(1.241)
ROA^c_t	0.015	11.647	0.002
	(0.446)	(8.590)	(1.168)
$SalesGrowth^c_t$	−0.213*	−6.441***	−0.475
	(0.123)	(2.108)	(0.299)
$LogAge^c_t$	−0.342	−12.720	−0.164
	(0.393)	(9.160)	(1.890)
CS Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	20,549	20,549	20,549
R^2	0.782	0.951	0.961

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA22 AI Diffusion along Supply Chains, Product Recall Increase, and Cost Reduction (Full-Controls Version of Table 9 in the Main Text)

Variables	(1) $Product_Recall_Increase^s_t$	(2) $Product_Recall_Increase^s_t$	(3) $Cost_Reduction^s_t$	(4) $Cost_Reduction^s_t$
$AI_Emp^c_{t-1}$		−0.002**		0.008**
		(0.001)		(0.003)
$AI_Emp^s_t$	−0.431**		0.552*	
	(0.147)		(0.297)	
$LogAsset^s_t$	0.948***	0.901***	−7.028***	−7.144***
	(0.240)	(0.244)	(1.012)	(1.023)
ROA^s_t	−2.155	−2.130		
	(1.496)	(1.570)		
$SalesGrowth^s_t$	0.208*	0.181	38.410***	38.450***
	(0.106)	(0.102)	(5.009)	(5.016)
$LogAge^s_t$	−1.010	−0.215	32.336***	31.780***
	(1.882)	(1.358)	(4.687)	(4.947)
IO^s_t	−0.833	−0.729	−13.340**	−13.151**
	(3.923)	(3.899)	(5.335)	(5.357)
$TobinQ^s_t$	0.130	0.036	5.399***	5.493***
	(0.371)	(0.374)	(1.098)	(1.080)
$LogAsset^c_t$	1.268	1.410	3.638*	3.441*
	(1.205)	(1.018)	(1.880)	(1.867)
ROA^c_t	−0.789	−0.507		
	(2.329)	(2.269)		
$SalesGrowth^c_t$	−0.853	−0.965	14.081**	14.177**
	(1.542)	(1.546)	(5.892)	(5.873)
$LogAge^c_t$	−2.060	−2.246	−8.113	−8.062
	(3.630)	(3.575)	(5.799)	(5.828)
$Leverage^s_t$	0.740	0.780	6.008	6.274
	(1.697)	(1.653)	(5.016)	(4.997)
$Leverage^c_t$	0.735	−0.040	9.229	9.889
	(0.789)	(0.785)	(6.532)	(6.434)
IO^c_t	0.499	0.526	3.261***	3.246***
	(0.546)	(0.539)	(0.918)	(0.922)
$TobinQ^c_t$	−0.250	−0.117	0.328	−0.175
	(0.249)	(0.259)	(1.176)	(1.155)
$NEmp^s_t$			−0.994*	−0.597
			(0.585)	(0.550)
$NEmp^c_t$			−0.027**	−0.051***
			(0.012)	(0.016)
CS Pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	10,873	10,873	18,749	18,749
R^2	0.272	0.269	0.258	0.257

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA23 H-1B Shocks and Other Tech Jobs (Full-Controls Version of Appendix Table A4)

Variables	(1) First Stage $Software^c_{t-1}$	(2) Second Stage $AI_Emp^s_t$	(3) First Stage $Automation^c_{t-1}$	(4) Second Stage $AI_Emp^s_t$
$H1B_Surprise^c_{t-1}$	0.124		−0.014	
	(0.675)		(0.045)	
$Software^c_{t-1}$ (instrumented)		0.018		
		(0.105)		
$Automation^c_{t-1}$ (instrumented)				−0.165
				(0.546)
$LogAsset^s_t$	15.942	−0.210	3.212	0.611
	(53.096)	(1.959)	(3.178)	(1.788)
ROA^s_t	−31.841	0.945	−2.609	−0.065
	(42.980)	(3.900)	(3.534)	(1.318)
$SalesGrowth^s_t$	13.847	−0.132	−0.496	0.037
	(9.839)	(1.540)	(1.341)	(0.298)
$LogAge^s_t$	−181.055	1.647	−27.608	−6.211
	(215.340)	(20.582)	(23.564)	(12.444)
$LogAsset^c_t$	162.556	−2.525	3.553	1.019
	(136.056)	(17.061)	(10.085)	(1.740)
ROA^c_t	69.860	−2.383	−49.581	−9.313
	(373.084)	(5.218)	(31.397)	(23.046)
$SalesGrowth^c_t$	−170.717*	2.807	−20.952***	−3.762
	(99.164)	(16.657)	(4.062)	(11.514)
$LogAge^c_t$	−1,319.727**	23.231	−194.914**	−33.003
	(594.572)	(146.423)	(84.550)	(96.094)
Cragg-Donald Wald F statistic	0.693		1.612	
CS Pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	9,137	9,137	9,137	9,137

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA24 H-1B First-Stage Test: Firms with Foreign Subsidiaries (Full-Controls Version of Appendix Table A5)

Variables	(1) High Foreign Subsidiary = 1 $AI_Emp^c_{t-1}$	(2) High Foreign Subsidiary = 0 $AI_Emp^c_{t-1}$
$H1B_Surprise^c_{t-1}$	−0.040	0.795***
	(0.080)	(0.246)
$LogAsset^s_t$	−1.221	23.826
	(1.909)	(25.196)
ROA^s_t	−4.172	−7.702
	(4.427)	(21.398)
$SalesGrowth^s_t$	0.486	4.574
	(0.453)	(3.317)
$LogAge^s_t$	−24.783**	63.267
	(9.268)	(66.563)
$LogAsset^c_t$	2.936	29.488
	(8.268)	(34.118)
ROA^c_t	−4.548	283.672*
	(21.790)	(162.218)
$SalesGrowth^c_t$	−5.309*	−42.277
	(2.821)	(29.932)
$LogAge^c_t$	−85.541	−284.122*
	(60.352)	(162.109)
Difference	−0.835***	
CS Pair FE	Yes	Yes
Year FE	Yes	Yes
Observations	4,135	4,625
R^2	0.761	0.783

Note: *, **, and *** indicate statistical significance at the 10%, 5%, a
level, respectively.

Table OA25 AI Generalizability: Diffusion across Different Industries (Full-Controls Version of Appendix Table A6)

	Service to Manufacturing			Manufacturing to Service		
Variables	(1) $AI_Emp^s_t$	(2) $Software^s_t$	(3) $Automation^s_t$	(4) $AI_Emp^s_t$	(5) $Software^s_t$	(6) $Automation^s_t$
$AI_Emp^c_{t-1}$	0.002***			0.004***		
	(0.000)			(0.001)		
$Software^c_{t-1}$		0.004			0.004	
		(0.006)			(0.005)	
$Automation^c_{t-1}$			−0.010			−0.001
			(0.015)			(0.002)
$LogAsset^s_t$	0.258	44.863*	0.007	0.937***	78.970***	5.803***
	(0.497)	(20.298)	(0.919)	(0.228)	(10.584)	(0.540)
ROA^s_t	0.583	12.795	3.837	1.145*	−2.876	−3.809***
	(0.590)	(33.603)	(4.407)	(0.485)	(12.965)	(0.788)
$SalesGrowth^s_t$	0.579	12.168	0.345	0.249	−0.625	−0.098
	(0.421)	(7.875)	(0.474)	(0.194)	(9.063)	(0.208)
$LogAge^s_t$	−2.800	349.334	4.202*	3.564	−67.101	6.054
	(2.141)	(199.317)	(1.784)	(2.063)	(131.634)	(3.676)
$LogAsset^c_t$	1.205**	−22.566	0.598	−0.712	−9.555	−6.256
	(0.382)	(14.330)	(1.206)	(0.630)	(7.569)	(3.666)
ROA^c_t	−0.452	−29.496	−34.554***	2.845**	−83.156**	−3.971
	(0.910)	(16.817)	(6.332)	(0.843)	(24.619)	(2.510)
$SalesGrowth^c_t$	0.136	16.251	−2.341	0.255	−21.729	0.909
	(0.497)	(23.872)	(2.212)	(0.249)	(15.630)	(0.485)
$LogAge^c_t$	8.767	19.856	−15.790	−3.150	−136.387	−12.736
	(4.654)	(54.194)	(16.873)	(3.697)	(122.720)	(9.735)
CS Pair FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	393	393	393	921	921	921
R^2	0.888	0.979	0.947	0.827	0.956	0.976

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA26 AI Diffusion along Supply Chains and Suppliers' Quality Improvement (Full-Controls Version of Appendix Table A7)

Variables	(1) $Quality_Improve_t^s$	(2) $Quality_Improve_t^s$
$AI_Emp_{t-1}^c$		0.008**
		(0.004)
$AI_Emp_t^s$	0.232***	
	(0.070)	
$LogAsset_t^s$	−0.402	−0.342
	(0.924)	(0.889)
ROA_t^s	−0.319	−0.234
	(2.172)	(2.180)
$SalesGrowth_t^s$	0.244	0.223
	(0.453)	(0.453)
$LogAge_t^s$	7.776**	7.208**
	(2.939)	(2.947)
IO_t^s	4.656	4.775
	(4.318)	(4.183)
$TobinQ_t^s$	0.289	0.348
	(0.332)	(0.338)
$LogAsset_t^c$	1.478	1.251
	(1.558)	(1.444)
ROA_t^c	−18.394**	−17.965**
	(7.306)	(7.468)
$SalesGrowth_t^c$	3.085**	3.192**
	(1.474)	(1.521)
$LogAge_t^c$	1.495	1.974
	(3.472)	(3.611)
$Leverage_t^s$	−5.166**	−4.860**
	(2.303)	(2.267)
$Leverage_t^c$	−8.376*	−7.694
	(4.649)	(4.805)
IO_t^c	−1.310*	−1.433*
	(0.664)	(0.718)
$TobinQ_t^c$	2.653***	2.566**
	(0.947)	(0.980)
CS Pair FE	Yes	Yes
Year FE	Yes	Yes
Observations	8,490	8,490
R^2	0.233	0.233

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Table OA27 AI Diffusion and Process Improvements (Full-Controls Version of Appendix Table A8)

Variables	(1) $CostReducing\ Patent_Increase_t^s$	(2) $CostReducing\ Patent_Increase_t^s$	(3) $QualityImprove\ Patent_Increase_t^s$	(4) $QualityImprove\ Patent_Increase_t^s$
$AI_Emp_{t-1}^c$		0.010**		0.004***
		(0.004)		(0.001)
$AI_Emp_t^s$	1.043***		0.429*	
	(0.347)		(0.242)	
$LogAsset_t^s$	1.919**	1.999**	−1.256	−1.224
	(0.802)	(0.755)	(1.377)	(1.404)
ROA_t^s	−0.743	−0.248	−1.698	−1.494
	(1.377)	(1.344)	(3.675)	(3.660)
$SalesGrowth_t^s$	−0.474	−0.443	−0.162	−0.149
	(0.435)	(0.419)	(0.339)	(0.333)
$LogAge_t^s$	−6.242	−6.541	−1.810	−1.930
	(5.071)	(5.002)	(3.923)	(3.595)
$LogAsset_t^c$	−3.888*	−4.567**	−0.415	−0.687
	(1.913)	(2.009)	(1.592)	(1.476)
ROA_t^c	−0.048	0.726	−11.859	−11.541
	(7.073)	(6.856)	(7.339)	(7.386)
$SalesGrowth_t^c$	3.743	3.986	3.074	3.171
	(2.917)	(2.818)	(3.790)	(3.724)
$LogAge_t^c$	11.157*	10.656*	4.315	4.102
	(5.955)	(5.590)	(4.098)	(4.039)
$Leverage_t^s$	−2.615	−1.858	−7.262**	−6.951**
	(3.771)	(3.565)	(2.719)	(2.643)
$Leverage_t^c$	3.264	2.730	−7.169*	−7.383**
	(2.263)	(2.482)	(3.559)	(3.615)
IO_t^s	2.233	1.125	1.808	1.351
	(2.845)	(2.486)	(5.922)	(5.797)
IO_t^c	−1.033	−0.778	−1.186	−1.082
	(1.204)	(1.059)	(1.800)	(1.844)
$TobinQ_t^c$	−0.721	−0.989	1.300	1.192
	(0.903)	(0.914)	(0.861)	(0.823)
$TobinQ_t^s$	0.213	0.369	0.632	0.697
	(0.343)	(0.334)	(0.609)	(0.632)
CS Pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	10,502	10,502	10,502	10,502
R^2	0.312	0.309	0.305	0.305

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.