

Online Supplement for

Do Employee Spinoffs Learn Markets From Their Parents? Evidence From International Trade

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This Online Supplement collects tables in two parts, A and B, for the following alternate sample definitions and specifications:

Part A. Comparison firms in same 3-digit industry and state as spinoff parent firms

Part B. Comparison firms in same 4-digit industry as spinoff parent firms, with distance controls

In each part, the initial Tables (S.A1 and S.B1) are identical to Table 1 in the text.

In part B, distance from a spinoff or comparison firm to a spinoff's parent is measured by kilometers from the firm's municipality to the parent's municipality, computed using coordinates for the political centers of the municipalities supplied by the Brazilian statistical agency *Instituto Brasileiro de Geografia e Estatística*. If the spinoff or comparison firm and the parent firm are in the same municipality, distance between them is zero. We cannot take the logarithm of zero, so we create an indicator variable that takes the value of one when the spinoff or comparison firm is in a different municipality from the parent and zero otherwise, and interact it with the logarithm of distance. We then add both the different municipality indicator (Diff. Muni.) and its interaction with the logarithm of distance (log Dist.) to the right-hand sides of the regressions in Tables S.B5 through S.B10.

S.1 Part A

This part of the Online Supplement presents results for comparison firms in the same 3-digit CNAE industry and the same federal Brazilian state as spinoff parent firms.

Table S.A1: Exporting Employee Spinoffs and Their Exporting Parents

	Number	Sizes ^a		Shares ^b			
		Mean	Median	Primary	Manufact.	Commerce	Services
Spinoffs							
Total	96,386	12.6	6	.02	.21	.36	.41
Ever exported ^c	1,978	48.1	10	.03	.66	.24	.07
Exported in entry yr	782	64.4	14	.04	.69	.22	.04
Exported in entry yr and parent exported in that yr	446	87.7	18	.04	.74	.17	.04
Parents							
Total	73,997	234.6	23	.03	.26	.38	.33
Ever exported ^c	6,143	927.2	161	.04	.76	.13	.07
Exported in entry yr of spinoff	3,360	1110.5	277	.04	.82	.09	.05
Exported in entry yr of spinoff that exported in its entry yr ^d	417	1109.8	246	.04	.81	.12	.04

^aThe mean and median size for parents are calculated from 68,114, 5,798, 3,307, and 410 parent firms for each row, respectively. Size data are available for all spinoffs.

^bIndustry shares for spinoffs (parents) are calculated from 88,675, 1,958, 774, 446 (61,418, 5,652, 3,259, 409) spinoff (parent) firms for each row, respectively. Primary: Agriculture and Mining; Manufact.: Manufacturing; Commerce: Wholesale and Retail Trade; Services: CNAE \geq 5500, excluding government activities. Among the industries included in CNAE \geq 5500 are Hotels and Restaurants; Transport, Storage, and Communications; Financial Intermediation; and Real Estate, Rental, and Business Activities.

^cStarting with the second row of the table for both spinoffs and parents, firms were dropped that in the spinoff entry year exported only to destinations coded as Brazil, not reported, or provisions for ships or airplanes.

^dOf these 417 parents, 21 had multiple spinoffs.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Note: This Table is identical to Table 1 in the text.

Table S.A2: Comparison Firms that Export in the Spinoff Entry Year

	Number	Sizes ^a			Shares ^b				
		Mean	Median	Primary	Manufact.	Commerce	Services	Parents	Spinoffs
Same 3-digit industry, state	27,582	140.0	54	.003	.88	.10	.02	389	416
Unique firms	9,938	112.6	37	.007	.77	.21	.02		

^aThe mean and median size for comparison firms are calculated from 26575 and 9580 firms for each row, respectively.

^bPrimary: Agriculture and Mining; Manufact.: Manufacturing; Commerce: Wholesale and Retail Trade; Services: CNAE \geq 5500, excluding government activities. Among the industries included in CNAE \geq 5500 are Hotels and Restaurants; Transport, Storage, and Communications; Financial Intermediation; and Real Estate, Rental, and Business Activities.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: Comparison firms export in the spinoff entry year and are in the same industry and locality as the spinoff's parent. Firms were dropped that in the spinoff entry year exported only to destinations coded as Brazil, not reported, or provisions for ships or airplanes. Other parent and spinoff firms were excluded from the comparison set for any given parent-spinoff pair.

Table S.A3: Descriptive Statistics for Export Products in Spinoff Entry Years

	Mean	Std. Dev.	Median	Maximum ^a	Unique ^b	Number
	(1)	(2)	(3)	(4)	(5)	(6)
Parent no.	19.93	42.31	4	269	.23	416 ^c
Spinoff no.	5.07	14.96	2	150	.50	416
Comparison no.	4.83	10.19	2	241	.38	27,582
Spin. overlap	.38	.38	.25	1	.66	416
Comp. overlap	.09	.21	.00	1	.15	27,582

^aThe minimum number of products is always one and the minimum overlap is always zero.

^bFor the first three rows, this column gives the fraction of firms that exported only one product. For the last two rows, this column gives the fraction of spinoff or comparison firms that shared the unique product with the corresponding parent firms.

^cParents with multiple spinoffs are counted multiple times.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: The total number of HS8 products recorded for this sample is 6,250, out of a possible 8,575 from the SECEX data.

Table S.A4: Descriptive Statistics for Export Destinations in Spinoff Entry Years

	Mean	Std. Dev.	Median	Maximum ^a	Unique ^b	Number
	(1)	(2)	(3)	(4)	(5)	(6)
Parent no.	9.77	12.54	4	77	.23	416 ^c
Spinoff no.	3.33	5	2	47	.48	416
Comparison no.	3.74	4.93	2	94	.43	27,582
Spin. overlap	.40	.36	.33	1	.68	416
Comp. overlap	.20	.25	.11	1	.24	27,582

^aThe minimum number of destinations is always one and the minimum overlap is always zero.

^bFor the first three rows, this column gives the fraction of firms that exported to only one destination. For the last two rows, this column gives the fraction of spinoff or comparison firms that shared the unique destination with the corresponding parent firms.

^cParents with multiple spinoffs are counted multiple times.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: The total number of destinations recorded for this sample is 201, out of a possible 234 from the SECEX data.

Table S.A5: Regressions for Parent Export Destinations in Spinoff Entry Years

	base	controls	count	wProd
	(1)	(2)	(3)	(4)
Spinoff	.201*** (.017)	.187*** (.017)	.194*** (.016)	.139*** (.015)
Spinoff/Comp Destinations			.027*** (.0009)	.026*** (.0009)
Parent Destinations			-.003*** (.0006)	-.003*** (.0006)
Product overlap				.203*** (.015)
Const.	.201*** (.007)	-.060 (.113)	-.052 (.114)	-.020 (.098)
Observations	27,998	27,998	27,998	27,998
R^2	.010	.158	.424	.439
Spinoffs	416	416	416	416
Comparisons	27,582	27,582	27,582	27,582

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: Dependent variable is spinoff/comparison overlap with parent export destinations in spinoff entry years. Starting with the “controls” column, all columns have 4-digit industry, municipality, and year controls. Standard errors are clustered by spinoff-year.

***significance at one, ** five, *ten percent levels.

Table S.A6: Regressions for New Parent Export Destinations, years $t + 1$ through $t + 6$

	$t + 1$				$t + 2$			
	base	controls	count	wProd	base	controls	count	wProd
Spinoff	.002 (.024)	.011 (.024)	.006 (.023)	-.010 (.022)	.031 (.031)	.031 (.029)	.034 (.029)	.024 (.025)
Spin/Comp Dest.			.016*** (.001)	.015*** (.001)			.017*** (.001)	.016*** (.001)
Parent New Dest. ^a			-.008* (.005)	-.009* (.005)			-.015 (.010)	-.014 (.009)
Product overlap ^b				.154*** (.041)				.078** (.038)
Const.	.111*** (.015)	.067 (.192)	-.028 (.167)	.011 (.163)	.109*** (.015)	.256** (.110)	.102 (.108)	.101 (.106)
Obs	8189	8189	8189	8189	4732	4732	4732	4732
R ²	6.96e-07	.200	.331	.337	.0003	.189	.356	.358
Spinoffs	135	135	135	135	95	95	95	95
Comparisons	8054	8054	8054	8054	4637	4637	4637	4637
	$t + 3$				$t + 4$			
	base	controls	count	wProd	base	controls	count	wProd
Spinoff	-.018 (.032)	-.018 (.031)	-.019 (.029)	-.024 (.028)	.001 (.052)	.014 (.048)	.014 (.039)	.006 (.038)
Spin/Comp Dest.			.019*** (.002)	.019*** (.002)			.018*** (.002)	.017*** (.002)
Parent New Dest. ^a			.007*** (.002)	.005*** (.002)			.023*** (.0008)	.016*** (.003)
Product overlap ^b				.068 (.045)				.141** (.060)
Const.	.129*** (.016)	.304*** (.006)	.159*** (.015)	.139*** (.020)	.131*** (.018)	.524*** (.020)	.721*** (.005)	.605*** (.050)
Obs	2955	2955	2955	2955	1733	1733	1733	1733
R ²	.0001	.189	.400	.402	7.44e-07	.162	.382	.392
Spinoffs	63	63	63	63	33	33	33	33
Comparisons	2892	2892	2892	2892	1700	1700	1700	1700
	$t + 5$				$t + 6$			
	base	controls	count	wProd	base	controls	count	wProd
Spinoff	.116 (.078)	.091 (.071)	.076 (.062)	.030 (.050)	.111 (.143)	.048 (.156)	.050 (.140)	-.051 (.139)
Spin/Comp Dest.			.015*** (.004)	.015*** (.004)			.017*** (.004)	.015*** (.003)
Parent New Dest. ^a			.179*** (.009)	.168*** (.010)			-.023*** (.007)	-.024*** (.006)
Product overlap ^b				.196** (.081)				.381*** (.073)
Const.	.115*** (.029)	.875*** (.026)	2.263*** (.069)	2.090*** (.107)	.213*** (.031)	.155*** (.039)	.073 (.057)	.066 (.050)
Obs	951	951	951	951	262	262	262	262
R ²	.005	.204	.333	.347	.004	.169	.270	.324
Spinoffs	23	23	23	23	9	9	9	9
Comparisons	928	928	928	928	253	253	253	253

^aNumber of parent export destinations in year $t + k$ excluding those in spinoff entry years.

^bSpinoff/comparison overlap in year $t + k$ with parent products exported to new destinations in year $t + k$.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: Dependent variable is spinoff/comparison overlap with parent export destinations in year $t + k$ excluding those in spinoff entry years. Starting with the “controls” column, all columns have 4-digit industry, municipality, and year controls. Standard errors are clustered by spinoff-year. ***significance at one, ** five, *ten percent levels.

Table S.A7: Regressions for Initial Parent Export Destinations, years $t + 1$ through $t + 6$

	$t + 1$					$t + 2$			
	base	controls	count	wProd		base	controls	count	wProd
Spinoff	.230*** (.020)	.215*** (.020)	.212*** (.019)	.161*** (.018)	Spinoff	.206*** (.023)	.179*** (.024)	.183*** (.023)	.143*** (.022)
Spin/Comp Dest.			.026*** (.0009)	.025*** (.0009)	Spin/Comp Dest.			.026*** (.001)	.025*** (.001)
Parent Initial Dest. ^a			-.003*** (.0009)	-.002*** (.0008)	Parent Initial Dest. ^a			-.004*** (.0008)	-.003*** (.0008)
Product overlap ^b				.175*** (.020)	Product overlap ^b				.154*** (.021)
Const.	.232*** (.008)	-.020 (.102)	-.045 (.094)	-.034 (.083)	Const.	.247*** (.009)	.145 (.101)	.080 (.098)	.090 (.087)
Obs	18515	18515	18515	18515	Obs	13402	13402	13402	13402
R ²	.013	.185	.448	.463	R ²	.010	.191	.450	.461
Spinoffs	320	320	320	320	Spinoffs	231	231	231	231
Comparisons	18195	18195	18195	18195	Comparisons	13171	13171	13171	13171
	$t + 3$					$t + 4$			
	base	controls	count	wProd		base	controls	count	wProd
Spinoff	.171*** (.027)	.167*** (.027)	.165*** (.026)	.135*** (.025)	Spinoff	.152*** (.035)	.150*** (.035)	.142*** (.033)	.121*** (.032)
Spin/Comp Dest.			.025*** (.001)	.024*** (.001)	Spin/Comp Dest.			.025*** (.001)	.025*** (.001)
Parent Initial Dest. ^a			-.003*** (.0008)	-.002*** (.0009)	Parent Initial Dest. ^a			-.004*** (.001)	-.004*** (.001)
Product overlap ^b				.123*** (.019)	Product overlap ^b				.096*** (.022)
Const.	.249*** (.011)	.233*** (.005)	.101*** (.013)	.077*** (.013)	Const.	.258*** (.014)	.254*** (.009)	.137*** (.018)	.124*** (.018)
Obs	9605	9605	9605	9605	Obs	5905	5905	5905	5905
R ²	.007	.212	.487	.494	R ²	.005	.217	.493	.497
Spinoffs	159	159	159	159	Spinoffs	92	92	92	92
Comparisons	9446	9446	9446	9446	Comparisons	5813	5813	5813	5813
	$t + 5$					$t + 6$			
	base	controls	count	wProd		base	controls	count	wProd
Spinoff	.193*** (.041)	.167*** (.039)	.146*** (.034)	.105*** (.034)	Spinoff	.249*** (.069)	.230*** (.071)	.204*** (.056)	.171** (.068)
Spin/Comp Dest.			.022*** (.002)	.022*** (.002)	Spin/Comp Dest.			.023*** (.003)	.022*** (.003)
Parent Initial Dest. ^a			-.002 (.002)	-.003** (.001)	Parent Initial Dest. ^a			.052*** (.006)	.052*** (.006)
Product overlap ^b				.145*** (.046)	Product overlap ^b				.107 (.099)
Const.	.239*** (.018)	.312*** (.010)	.150*** (.024)	.137*** (.024)	Const.	.243*** (.024)	.297*** (.018)	-.528*** (.101)	-.536*** (.109)
Obs	2753	2753	2753	2753	Obs	1198	1198	1198	1198
R ²	.010	.258	.519	.527	R ²	.012	.255	.522	.525
Spinoffs	55	55	55	55	Spinoffs	18	18	18	18
Comparisons	2698	2698	2698	2698	Comparisons	1180	1180	1180	1180

^aNumber of parent export destinations in spinoff entry years.

^bSpinoff/comparison overlap in year $t + k$ with parent export products in spinoff entry years.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: Dependent variable is spinoff/comparison overlap in year $t + k$ with parent export destinations in spinoff entry years. Starting with the “controls” column, all columns have 4-digit industry, municipality, and year controls. Standard errors are clustered by spinoff-year. *** significance at one, ** five, * ten percent levels.

Table S.A8: OLS Regressions for $t+1$ Export Destinations Adjacent to Parent Export Destinations in Spinoff Entry Years

	Contiguous	Language	Income	Continent
	(1)	(2)	(3)	(4)
Entry Parent Dest.	.026*** (.003)	.013*** (.001)	.006*** (.0007)	.008*** (.0009)
Spin/Comp Destinations	.003*** (.0003)	.002*** (.0003)	.002*** (.0002)	.002*** (.0002)
Parent Destinations	-.0005*** (.0001)	-.0007*** (.00009)	-.0003*** (.00004)	-.0002*** (.00004)
Product overlap	.014** (.005)	-.002 (.003)	.007** (.003)	.003 (.003)
log Size	.0004 (.0003)	.0004* (.0002)	-.0002 (.0002)	-.0002 (.0002)
Observations	560,587	7,920,793	8,624,686	5,275,786
R^2	.052	.037	.030	.023
Mean Dep Var	.013	.010	.008	.005
Spinoffs	7,115	102,007	111,789	7,1783
Comparisons	553,472	7,818,786	8,512,897	5,204,003

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: The sample universe is all destinations adjacent to parent export destinations in spinoff entry years that are not themselves parent export destinations in the spinoff entry years. Dependent variables are indicators for export in year $t + 1$ to each adjacent destination in the sample. Adjacency is defined differently in each column, comprising either destinations that are contiguous, have a common language, have a common income level (by the World Bank's classification for calendar year 1998), or are on a common continent, excluding destinations that are adjacent to Brazil by the respective definition. Entry Parent Dest. is an indicator for export to parent destination in spinoff entry year. All columns have 3-digit industry, state, and year controls. Standard errors are clustered by spinoff-year. *** significance at one, ** five, *ten percent levels.

Table S.A9: First Stage of IV Regressions for Adjacent Export Destinations

	Contiguous (1)	Language (2)	Income (3)	Continent (4)
Spinoff	.064*** (.012)	.034*** (.008)	.045*** (.008)	.049*** (.011)
Spin/Comp Destinations	.017*** (.0007)	.019*** (.001)	.018*** (.0008)	.014*** (.0007)
Parent Destinations	-.004*** (.0008)	-.005*** (.0007)	-.003*** (.0004)	-.0008** (.0004)
Product overlap	.134*** (.021)	.213*** (.022)	.173*** (.017)	.142*** (.017)
log Size	.007*** (.001)	.007*** (.001)	.004*** (.0009)	-.0006 (.0009)
Observations	560,587	7,920,793	8,624,686	5,275,786
R^2	.169	.182	.172	.176
Spinoffs	7,115	102,007	111,789	71,783
Comparisons	553,472	7,818,786	8,512,897	5,204,003
K-P F -test (weak id)	28.325	16.496	33.065	20.111

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: Dependent variables are indicators for export to parent destinations in spinoff entry years, where the parent destinations are adjacent to at least one other country that is not a parent export destination. Adjacency is defined differently in each column, comprising either destinations that are contiguous, have a common language, have a common income level (by the World Bank's classification for calendar year 1998), or are on a common continent, excluding destinations that are adjacent to Brazil by the respective definition. All columns have 3-digit industry, state, and year controls. Standard errors are clustered by spinoff-year. Standard errors are clustered by spinoff-year. ***significance at one, **five, *ten percent levels.

Table S.A10: IV Regressions for $t + 1$ Export Destinations Adjacent to Parent Export Destinations in Spinoff Entry Years

	Contiguous (1)	Language (2)	Income (3)	Continent (4)
Entry Parent Dest.	-.137** (.062)	-.14** (.069)	-.137** (.053)	-.07* (.04)
Spin/Comp Destinations	.005*** (.001)	.005*** (.001)	.005*** (.0009)	.003*** (.0006)
Parent Destinations	-.001*** (.0003)	-.001*** (.0004)	-.0006*** (.0001)	-.0003*** (.00005)
Product overlap	.037*** (.011)	.032** (.015)	.033*** (.01)	.014** (.006)
log Size	.001** (.0006)	.001** (.0006)	.0003 (.0004)	-.0003 (.0002)
Observations	560,587	7,920,793	8,624,686	5,275,786
Mean Dep Var	.013	.010	.008	.005
Spinoffs	7,115	102,007	111,789	7,1783
Comparisons	553,472	7,818,786	8,512,897	5,204,003

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: The sample universe is all destinations adjacent to parent export destinations in spinoff entry years that are not themselves parent export destinations in the spinoff entry years. Dependent variables are indicators for export in year $t + 1$ to each adjacent destination in the sample. Adjacency is defined differently in each column, comprising either destinations that are contiguous, have a common language, have a common income level (by the World Bank's classification for calendar year 1998), or are on a common continent, excluding destinations that are adjacent to Brazil by the respective definition. Entry Parent Dest. is instrumented by spinoff status. All columns have 3-digit industry, state, and year controls. Standard errors are clustered by spinoff-year. ***significance at one, ** five, *ten percent levels.

S.2 Part B

This part of the Online Supplement presents results for comparison firms in same 4-digit CNAE industry as spinoff parent firms, with distance controls included in the specifications.

Table S.B1: Exporting Employee Spinoffs and Their Exporting Parents

	Number	Sizes ^a		Shares ^b			
		Mean	Median	Primary	Manufact.	Commerce	Services
Spinoffs							
Total	96,386	12.6	6	.02	.21	.36	.41
Ever exported ^c	1,978	48.1	10	.03	.66	.24	.07
Exported in entry yr	782	64.4	14	.04	.69	.22	.04
Exported in entry yr and parent exported in that yr	446	87.7	18	.04	.74	.17	.04
Parents							
Total	73,997	234.6	23	.03	.26	.38	.33
Ever exported ^c	6,143	927.2	161	.04	.76	.13	.07
Exported in entry yr of spinoff	3,360	1110.5	277	.04	.82	.09	.05
Exported in entry yr of spinoff that exported in its entry yr ^d	417	1109.8	246	.04	.81	.12	.04

^aThe mean and median size for parents are calculated from 68,114, 5,798, 3,307, and 410 parent firms for each row, respectively. Size data are available for all spinoffs.

^bIndustry shares for spinoffs (parents) are calculated from 88,675, 1,958, 774, 446 (61,418, 5,652, 3,259, 409) spinoff (parent) firms for each row, respectively. Primary: Agriculture and Mining; Manufact.: Manufacturing; Commerce: Wholesale and Retail Trade; Services: CNAE \geq 5500, excluding government activities. Among the industries included in CNAE \geq 5500 are Hotels and Restaurants; Transport, Storage, and Communications; Financial Intermediation; and Real Estate, Rental, and Business Activities.

^cStarting with the second row of the table for both spinoffs and parents, firms were dropped that in the spinoff entry year exported only to destinations coded as Brazil, not reported, or provisions for ships or airplanes.

^dOf these 417 parents, 21 had multiple spinoffs.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Note: This Table is identical to Table 1 in the text.

Table S.B2: Comparison Firms that Export in the Spinoff Entry Year

	Number	Sizes ^a		Shares ^b					Spinoffs
		Mean	Median	Primary	Manufact.	Commerce	Services	Parents	
Same 4-digit industry	41,231	114.0	45	.02	.85	.12	.01	408	437
Unique firms	12,830	107.5	33	.02	.74	.22	.02		

^aThe mean and median size for comparison firms are calculated from 39,575 and 12,354 firms for each row, respectively.

^bPrimary: Agriculture and Mining; Manufact.: Wholesale and Retail Trade; Services: CNAE \geq 5500, excluding government activities. Among the industries included in CNAE \geq 5500 are Hotels and Restaurants; Transport, Storage, and Communications; Financial Intermediation; and Real Estate, Rental, and Business Activities.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: Comparison firms export in the spinoff entry year and are in the same 4-digit industry as the spinoff's parent. Firms were dropped that in the spinoff entry year exported only to destinations coded as Brazil, not reported, or provisions for ships or airplanes. Other parent and spinoff firms were excluded from the comparison set for any given parent-spinoff pair.

Table S.B3: Descriptive Statistics for Export Products in Spinoff Entry Years

	Mean (1)	Std. Dev. (2)	Median (3)	Maximum ^a (4)	Unique ^b (5)	Number (6)
Parent no.	19.00	41.04	4	269	.22	437 ^c
Spinoff no.	5.01	14.65	2	150	.50	437
Comparison no.	4.41	12.30	2	541	.41	41,231
Spin. overlap	.38	.38	.25	1	.68	437
Comp. overlap	.12	.21	.00	1	.10	41,231

^aThe minimum number of products is always one and the minimum overlap is always zero.

^bFor the first three rows, this column gives the fraction of firms that exported only one product. For the last two rows, this column gives the fraction of spinoff or comparison firms that shared the unique product with the corresponding parent firms.

^cParents with multiple spinoffs are counted multiple times.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: The total number of HS8 products recorded for this sample is 6,434, out of a possible 8,575 from the SECEX data.

Table S.B4: Descriptive Statistics for Export Destinations in Spinoff Entry Years

	Mean (1)	Std. Dev. (2)	Median (3)	Maximum ^a (4)	Unique ^b (5)	Number (6)
Parent no.	9.55	12.34	4	77	.22	437 ^c
Spinoff no.	3.30	4.90	2	47	.48	437
Comparison no.	3.53	4.71	2	89	.44	41,153
Spin. overlap	.41	.35	.33	1	.69	437
Comp. overlap	.19	.23	.10	1	.25	41,231

^aThe minimum number of destinations is always one and the minimum overlap is always zero.

^bFor the first three rows, this column gives the fraction of firms that exported to only one destination. For the last two rows, this column gives the fraction of spinoff or comparison firms that shared the unique destination with the corresponding parent firms.

^cParents with multiple spinoffs are counted multiple times.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: The total number of destinations recorded for this sample is 206, out of a possible 234 from the SECEX data.

Table S.B5: Regressions for Parent Export Destinations in Spinoff Entry Years

	base (1)	controls (2)	count (3)	wProd (4)	wDist (5)
Spinoff	.221*** (.017)	.205*** (.017)	.215*** (.016)	.155*** (.015)	.136*** (.016)
Spinoff/Comp Destinations			.026*** (.0007)	.025*** (.0007)	.025*** (.0007)
Parent Destinations			-.003*** (.0009)	-.003*** (.0009)	-.003*** (.0009)
Product overlap				.204*** (.014)	.200*** (.014)
Diff. Muni..					.014 (.009)
log Dist.					-.007*** (.001)
Const.	.186*** (.005)	-.017 (.048)	-.042 (.045)	-.051 (.044)	.008 (.045)
Observations	41,668	41,668	41,590	41,590	39,942
R^2	.009	.138	.399	.418	.421
Spinoffs	437	437	437	437	437
Comparisons	41,231	41,231	41,153	41,153	39,505

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: Dependent variable is spinoff/comparison overlap with parent export destinations in spinoff entry years. Starting with the “controls” column, all columns have 4-digit industry, municipality, and year controls. Standard errors are clustered by spinoff-year.

*** significance at one, ** five, * ten percent levels.

Table S.B6: Regressions for New Parent Export Destinations, years $t + 1$ through $t + 6$

	$t + 1$					$t + 2$				
	base	controls	count	wProd	wDist	base	controls	count	wProd	wDist
Spinoff	.001 (.023)	.007 (.024)	.003 (.022)	-.013 (.022)	-.014 (.024)	.007 (.032)	.020 (.031)	.026 (.030)	.016 (.026)	.014 (.029)
Spin/Comp Dest.			.017*** (.0009)	.016*** (.0009)	.016*** (.0009)			.018*** (.001)	.018*** (.001)	.018*** (.001)
Parent New Dest. ^a			-.004 (.003)	-.004 (.003)	-.004 (.002)			-.007 (.005)	-.006 (.005)	-.006 (.005)
Product overlap ^b				.116*** (.030)	.114*** (.031)				.071** (.033)	.070** (.034)
Diff. Muni..					-.004 (.017)					-.001 (.024)
log Dist.					-.001 (.002)					-.001 (.003)
Const.	.108*** (.009)	.038 (.076)	-.099 (.070)	-.089 (.066)	-.065 (.067)	.131*** (.015)	.195*** (.037)	.044 (.057)	.030 (.056)	.048 (.060)
Obs	11730	11730	11730	11730	11262	7107	7107	7107	7107	6820
R ²	3.72e-07	.154	.340	.346	.349	1.00e-05	.196	.350	.352	.354
Spinoffs	139	139	139	139	132	93	93	93	93	89
Comparisons	11591	11591	11591	11591	11130	7014	7014	7014	7014	6731
	$t + 3$					$t + 4$				
	base	controls	count	wProd	wDist	base	controls	count	wProd	wDist
Spinoff	-.005 (.034)	-.009 (.029)	-.002 (.029)	-.011 (.028)	-.008 (.034)	.002 (.047)	-.019 (.050)	-.017 (.044)	-.025 (.043)	-.028 (.039)
Spin/Comp Dest.			.020*** (.002)	.019*** (.002)	.019*** (.002)			.017*** (.001)	.016*** (.001)	.016*** (.001)
Parent New Dest. ^a			.004*** (.0006)	.003*** (.0007)	.003*** (.0008)			.010*** (.001)	.008*** (.001)	.008*** (.001)
Product overlap ^b				.084*** (.028)	.085*** (.029)				.084*** (.030)	.085*** (.030)
Diff. Muni..					.022 (.018)					.016 (.032)
log Dist.					-.002 (.004)					-.001 (.003)
Const.	.136*** (.013)	.180*** (.0003)	.085*** (.007)	.070*** (.008)	.068*** (.025)	.120*** (.013)	.757*** (.003)	.825*** (.009)	.769*** (.023)	.770*** (.032)
Obs	4464	4464	4464	4464	4311	2860	2860	2860	2860	2780
R ²	5.52e-06	.178	.380	.384	.388	6.34e-07	.161	.380	.387	.389
Spinoffs	66	66	66	66	63	36	36	36	36	33
Comparisons	4398	4398	4398	4398	4248	2824	2824	2824	2824	2747
	$t + 5$					$t + 6$				
	base	controls	count	wProd	wDist	base	controls	count	wProd	wDist
Spinoff	.110 (.071)	.095 (.077)	.084 (.073)	.059 (.067)	.018 (.069)	.142 (.133)	.079 (.162)	.082 (.147)	.031 (.143)	-.027 (.140)
Spin/Comp Dest.			.014*** (.002)	.014*** (.002)	.014*** (.002)			.016*** (.002)	.015*** (.002)	.015*** (.002)
Parent New Dest. ^a			.079*** (.013)	.070*** (.014)	.069*** (.013)			-.040*** (.007)	-.041*** (.006)	-.029*** (.010)
Product overlap ^b				.080 (.062)	.064 (.061)				.154** (.062)	.173** (.069)
Diff. Muni..					-.036 (.038)					.037 (.071)
log Dist.					-.006 (.005)					-.023 (.017)
Const.	.102*** (.013)	.225*** (.004)	.820*** (.097)	.711*** (.129)	.771*** (.117)	.150*** (.028)	.037*** (.002)	.082*** (.020)	.076*** (.019)	.168*** (.057)
Obs	1914	1914	1914	1914	1841	584	584	584	584	565
R ²	.003	.089	.279	.283	.290	.004	.108	.234	.248	.263
Spinoffs	25	25	25	25	25	10	10	10	10	10
Comparisons	1889	1889	1889	1889	1816	574	574	574	574	555

^aNumber of parent export destinations in year $t + k$ excluding those in spinoff entry years.

^bSpinoff/comparison overlap in year $t + k$ with parent products exported to new destinations in year $t + k$.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: Dependent variable is spinoff/comparison overlap with parent export destinations in year $t + k$ excluding those in spinoff entry years. Starting with the “controls” column, all columns have 4-digit industry, municipality, and year controls. Standard errors are clustered by spinoff-year. ***significance at one, **five, *ten percent levels.

Table S.B7: Regressions for Initial Parent Export Destinations, years $t + 1$ through $t + 6$

	$t + 1$					$t + 2$						
	base	controls	count	wProd	wDist	base	controls	count	wProd	wDist		
Spinoff	.257*** (.019)	.237*** (.019)	.235*** (.019)	.196*** (.018)	.176*** (.019)	.233*** (.023)	.205*** (.024)	.212*** (.023)	.176*** (.022)	.156*** (.023)		
Spin/Comp Dest.			.024*** (.0007)	.024*** (.0007)	.023*** (.0007)			.025*** (.0007)	.024*** (.0007)	.024*** (.0007)		
Parent Initial Dest. ^a			-.001** (.0005)	-.001** (.0005)	-.001** (.0005)			-.002*** (.0006)	-.001* (.0007)	-.001** (.0007)		
Product overlap ^b				.128*** (.015)	.122*** (.016)				.127*** (.016)	.118*** (.016)		
Diff. Muni..					.011 (.011)					.019 (.013)		
log Dist.					-.008*** (.002)					-.010*** (.002)		
Const.	.211*** (.006)	-.079 (.052)	-.144*** (.049)	-.137*** (.045)	-.070 (.048)	.228*** (.006)	-.051 (.069)	-.137** (.067)	-.103* (.062)	-.047 (.066)		
Obs	27581	27581	27581	27581	26423	19972	19972	19972	19972	19190		
R ²	.013	.159	.420	.433	.436	.010	.156	.432	.444	.449		
Spinoffs	333	333	333	333	321	239	239	239	239	229		
Comparisons	27248	27248	27248	27248	26102	19733	19733	19733	19733	18961		
		$t + 3$						$t + 4$				
	base	controls	count	wProd	wDist	base	controls	count	wProd	wDist		
Spinoff	.202*** (.026)	.186*** (.028)	.190*** (.027)	.162*** (.026)	.130*** (.027)	.187*** (.033)	.173*** (.035)	.170*** (.033)	.146*** (.033)	.127*** (.034)		
Spin/Comp Dest.			.024*** (.0008)	.023*** (.0008)	.023*** (.0008)			.023*** (.0009)	.023*** (.0009)	.023*** (.0009)		
Parent Initial Dest. ^a			-.002** (.0007)	-.0009 (.0008)	-.0009 (.0009)			-.001 (.0009)	-.002* (.0009)	-.002* (.0009)		
Product overlap ^b				.104*** (.014)	.095*** (.014)				.090*** (.018)	.083*** (.018)		
Diff. Muni..					.004 (.015)					.017 (.019)		
log Dist.					-.010*** (.002)					-.009*** (.003)		
Const.	.224*** (.007)	.196*** (.0002)	.109*** (.009)	.096*** (.011)	.170*** (.021)	.229*** (.008)	.190*** (.0003)	.100*** (.011)	.098*** (.011)	.149*** (.023)		
Obs	13522	13522	13522	13522	13050	8671	8671	8671	8671	8403		
R ²	.009	.140	.437	.445	.455	.007	.155	.470	.476	.481		
Spinoffs	169	169	169	169	163	100	100	100	100	97		
Comparisons	13353	13353	13353	13353	12887	8571	8571	8571	8571	8306		
		$t + 5$						$t + 6$				
	base	controls	count	wProd	wDist	base	controls	count	wProd	wDist		
Spinoff	.235*** (.042)	.218*** (.041)	.204*** (.040)	.149*** (.039)	.135*** (.041)	.259*** (.071)	.258*** (.069)	.250*** (.056)	.185*** (.054)	.184*** (.053)		
Spin/Comp Dest.			.021*** (.001)	.021*** (.001)	.021*** (.001)			.022*** (.002)	.022*** (.002)	.022*** (.002)		
Parent Initial Dest. ^a			-.002 (.002)	-.003* (.002)	-.003* (.002)			-.002* (.0009)	-.001 (.0009)	.0001 (.002)		
Product overlap ^b				.166*** (.035)	.147*** (.032)				.196*** (.068)	.187*** (.068)		
Diff. Muni..					.047 (.035)					-.011 (.020)		
log Dist.					-.016*** (.005)					.0002 (.004)		
Const.	.221*** (.013)	.195*** (.0005)	.122*** (.021)	.125*** (.023)	.184*** (.038)	.241*** (.019)	.198*** (.0008)	.110*** (.019)	.100*** (.019)	.094*** (.027)		
Obs	4160	4160	4160	4160	4013	1648	1648	1648	1648	1592		
R ²	.012	.177	.452	.467	.483	.012	.175	.461	.477	.483		
Spinoffs	59	59	59	59	57	20	20	20	20	20		
Comparisons	4101	4101	4101	4101	3956	1628	1628	1628	1628	1572		

^aNumber of parent export destinations in spinoff entry years.

^bSpinoff/comparison overlap in year $t + k$ with parent export products in spinoff entry years.

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: Dependent variable is spinoff/comparison overlap in year $t + k$ with parent export destinations in spinoff entry years. Starting with the “controls” column, all columns have 4-digit industry, municipality, and year controls. Standard errors are clustered by spinoff-year. ***significance at one, ** five, *ten percent levels.

Table S.B8: OLS Regressions for $t+1$ Export Destinations Adjacent to Parent Export Destinations in Spinoff Entry Years

	Contiguous (1)	Language (2)	Income (3)	Continent (4)
Entry Parent Dest.	.032*** (.002)	.009*** (.001)	.007*** (.0007)	.008*** (.0009)
Spin/Comp Destinations	.004*** (.0003)	.003*** (.0002)	.003*** (.0003)	.002*** (.0002)
Parent Destinations	-.0006*** (.0002)	-.0006*** (.00008)	-.0003*** (.00005)	-.0002*** (.00007)
Product overlap	.008* (.005)	-.004** (.002)	.002 (.002)	.001 (.002)
log Size	.0007** (.0003)	.0004** (.0002)	-.0002 (.0002)	-.0002 (.0002)
Diff. Muni.	.002 (.003)	-.0005 (.001)	-.0004 (.002)	-.0006 (.002)
log Dist.	.0002 (.0003)	.0004** (.0002)	.0004 (.0003)	.0002 (.0002)
Observations	615,439	9,367,043	9,734,422	6,172,345
R^2	.059	.037	.038	.028
Mean Dep Var	.016	.010	.011	.007
Spinoffs	7,361	103,787	113,931	73,624
Comparisons	608,078	9,263,256	9,620,491	6,098,721

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: The sample universe is all destinations adjacent to parent export destinations in spinoff entry years that are not themselves parent export destinations in the spinoff entry years. Dependent variables are indicators for export in year $t + 1$ to each adjacent destination in the sample. Adjacency is defined differently in each column, comprising either destinations that are contiguous, have a common language, have a common income level (by the World Bank's classification for calendar year 1998), or are on a common continent, excluding destinations that are adjacent to Brazil by the respective definition. Entry Parent Dest. is an indicator for export to parent destination in spinoff entry year. All columns have 4-digit industry, municipality, and year controls. Standard errors are clustered by spinoff-year. ***significance at one, **five, *ten percent levels.

Table S.B9: First Stage of IV Regressions for Adjacent Export Destinations

	Contiguous (1)	Language (2)	Income (3)	Continent (4)
Spinoff	.053*** (.012)	.033*** (.009)	.044*** (.009)	.045*** (.011)
Spin/Comp Destinations	.018*** (.0008)	.02*** (.001)	.019*** (.0008)	.016*** (.0009)
Parent Destinations	-.004*** (.0007)	-.005*** (.0005)	-.003*** (.0005)	-.001** (.0005)
Product overlap	.155*** (.026)	.178*** (.021)	.163*** (.022)	.142*** (.027)
log Size	.006*** (.001)	.008*** (.001)	.005*** (.001)	-.0004 (.0008)
Diff. Muni.	.007 (.007)	.023** (.009)	.009 (.008)	-.003 (.009)
log Dist.	-.003*** (.001)	-.008*** (.002)	-.005*** (.001)	-.002 (.001)
Observations	615,439	9,367,043	9,734,422	6,172,345
R^2	.182	.184	.179	.197
Spinoffs	7,361	103,787	113,931	73,624
Comparisons	608,078	9,263,256	9,620,491	6,098,721
K-P F -test (weak id)	19.592	13.959	25.170	16.566

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: Dependent variables are indicators for export to parent destinations in spinoff entry years, where the parent destinations are adjacent to at least one other country that is not a parent export destination. Adjacency is defined differently in each column, comprising either destinations that are contiguous, have a common language, have a common income level (by the World Bank's classification for calendar year 1998), or are on a common continent, excluding destinations that are adjacent to Brazil by the respective definition. All columns have 4-digit industry, municipality, and year controls. Standard errors are clustered by spinoff-year. *** significance at one, ** five, * ten percent levels.

Table S.B10: IV Regressions for $t + 1$ Export Destinations Adjacent to Parent Export Destinations in Spinoff Entry Years

	Contiguous (1)	Language (2)	Income (3)	Continent (4)
Entry Parent Dest.	-.188** (.091)	-.153* (.084)	-.155** (.072)	-.1* (.059)
Spin/Comp Destinations	.008*** (.002)	.006*** (.002)	.006*** (.001)	.004*** (.0009)
Parent Destinations	-.002*** (.0004)	-.001*** (.0004)	-.0008*** (.0002)	-.0003*** (.0001)
Product overlap	.043*** (.017)	.025* (.015)	.029** (.013)	.017* (.009)
log Size	.002** (.0008)	.002** (.0008)	.0007 (.0006)	-.0002 (.0002)
Diff. Muni.	.002 (.003)	.003 (.003)	.0004 (.003)	-.001 (.002)
log Dist.	-.0004 (.0005)	-.0009 (.0007)	-.0004 (.0005)	-8.17e-06 (.0003)
Observations	615,439	9,367,043	9,734,422	6,172,345
Mean Dep Var	.016	.010	.011	.007
Spinoffs	7,361	103,787	113,931	73,624
Comparisons	608,078	9,263,256	9,620,491	6,098,721

Sources: RAIS 1986-2001 and SECEX 1995-2001.

Notes: The sample universe is all destinations adjacent to parent export destinations in spinoff entry years that are not themselves parent export destinations in the spinoff entry years. Dependent variables are indicators for export in year $t + 1$ to each adjacent destination in the sample. Adjacency is defined differently in each column, comprising either destinations that are contiguous, have a common language, have a common income level (by the World Bank's classification for calendar year 1998), or are on a common continent, excluding destinations that are adjacent to Brazil by the respective definition. Entry Parent Dest. is instrumented by spinoff status. All columns have 4-digit industry, municipality, and year controls. Standard errors are clustered by spinoff-year. Standard errors are clustered by spinoff-year. ***significance at one, **five, *ten percent levels.