

# Online Appendix to Cross-channel competition and complementarities in US retail

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## O.1 Representativeness of the Comscore Web Behavior Database

Table O.1 characterizes the representativeness of the Comscore Web Behavior Database’s panelists for the year 2007 by comparing the demographic profile of these panelists with demographic distributions reported in publications for the 2007 Current Population Survey (CPS) of the United States Census Bureau. The table suggests that the Comscore panelists are broadly representative of the population of United States internet users, with a few exceptions. In particular, Comscore oversamples Hispanic and white people relative to the CPS, and undersamples Asian people. Note that we use the CPS for all households to obtain information on variables that are not available in the CPS Computer and Internet Use Supplement (e.g., household income and census region of residence).

## O.2 Additional Nadaraya-Watson kernel regressions

This section presents additional results of Nadaraya-Watson kernel regressions, analogous to those in Figure 1 in the main text. To illustrate heterogeneous relationships between online sales and offline retail presence, we present the regression results for both within- and between-retailer relationships between online sales and offline presence, focusing on major retailers in each category shown in Tables 2 and 3 in the main text. We present the results for the 2007-2008 period and 2017-2018 period separately.

**Electronics (2007-2008).** Figure O.1a displays the result of the regression of positive spending at Best Buy’s online store on the consumer’s distance from the closest Best Buy store. It shows a mildly negative relationship between distance and transaction, which is consistent with a positive effect of own offline stores on online sales. Figure O.1b depicts the results of the regression of positive spending on electronics products at Amazon on the distance from Best Buy’s offline store. We find a mildly negative relationship (up to around 15km), which is consistent with a positive showrooming effect of Best Buy’s physical stores on the sales at Amazon.

**Office Supplies. (2007-2008).** Figures O.1c and O.1d show the results of the regression of positive spending on office supplies at Staples’ online store on the distance from the physical store of Staples and OfficeMax, respectively. As the distance from the nearest Staples store

Table O.1: Representativeness of the Comscore Web Behavior Database for 2007

Variable	Comscore	CPS (All households)	CPS (Internet users)
Age: Under 24	0.02	0.06	0.06
Age: 25-34	0.15	0.16	0.18
Age: 35-44	0.27	0.19	0.23
Age: 45-54	0.28	0.21	0.24
Age: 55+	0.27	0.38	0.30
Hispanic	0.23	-	0.08
Race: White	0.94	-	0.84
Race: Black	0.05	-	0.09
Race: Asian	0.01	-	0.07
Race: Other	0.00	-	0.00
Household size: 1	0.06	0.28	-
Household size: 2	0.34	0.33	-
Household size: 3	0.24	0.16	-
Household size: 4	0.19	0.14	-
Household size: 5+	0.17	0.10	-
Census region: Northeast	0.19	0.18	-
Census region: North Central	0.22	0.22	-
Census region: South	0.39	0.37	-
Census region: West	0.20	0.22	-
Household income: Under 15k	0.13	0.13	-
Household income: 15-24k	0.08	0.12	-
Household income: 25-34k	0.10	0.11	-
Household income: 35-49k	0.15	0.14	-
Household income: 50-74k	0.22	0.18	-
Household income: 75-99k	0.14	0.11	-
Household income: 100k+	0.18	0.20	-
Broadband	0.87	-	0.82

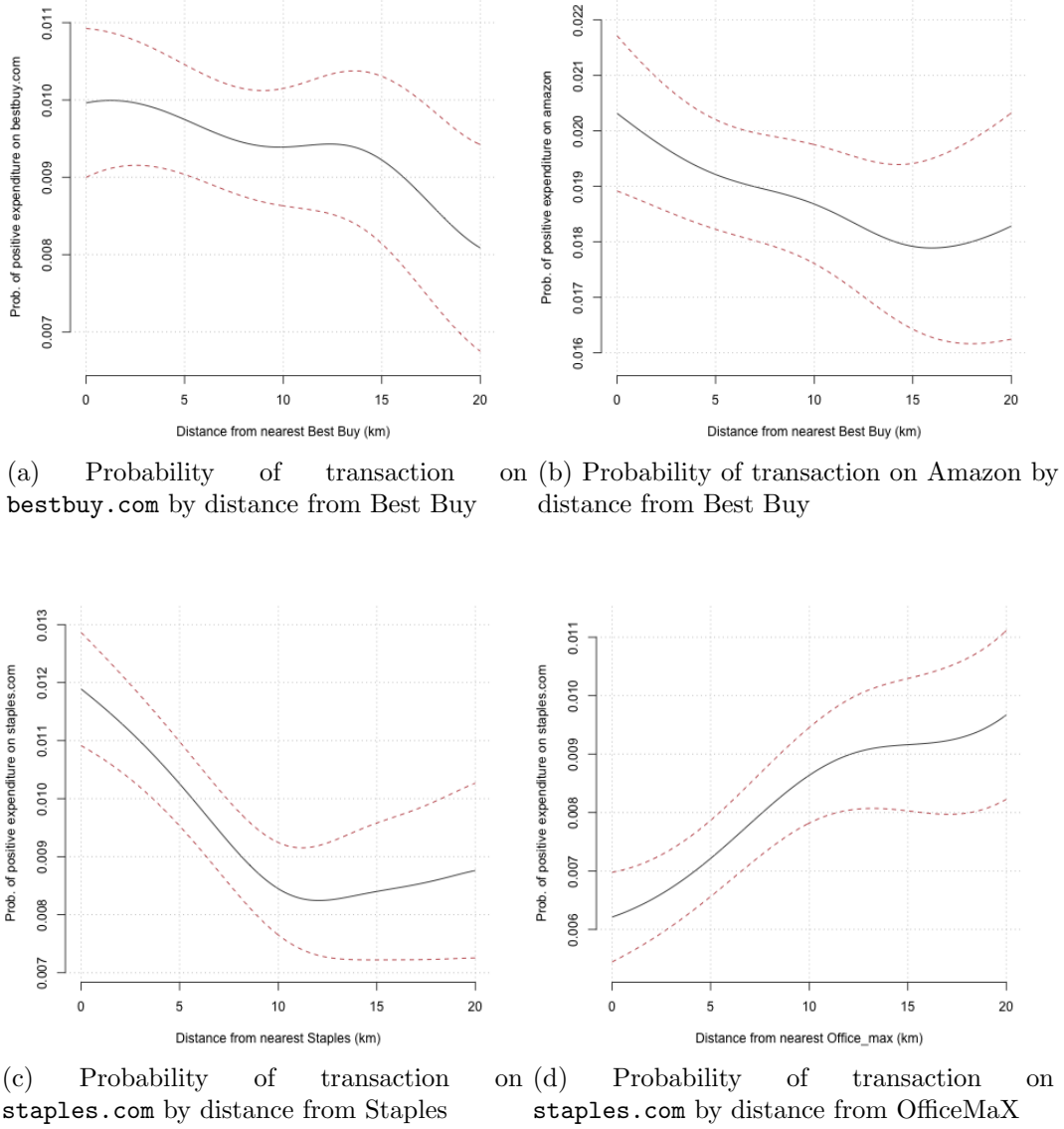
Notes: This table compares the distribution of demographic variables among 2007 Comscore Web Behavior Database panelists with the distributions of these variables from the household-level 2007 Current Population Survey—which is labelled “CPS (All households)” in the table—and the 2007 Computer and Internet Use Supplement of the Current Population Survey, which is labelled “CPS (Internet users)” in the table. The table’s figures from the Computer and Internet Use Supplement describe the distribution of demographic variables within the population of householders that uses the internet.

increases (up to around 10km), consumers are less likely to spend on office supplies at Staples’ online store. By contrast, consumers are more likely to make a purchase at Staples online as they become further away from OfficeMax’s physical store. This stark contrast is consistent with the Staples online store being subject to a positive own-store effect and a negative rival-store effect, though the relationships are not necessarily causal.

2017-2018. Figure O.2 presents the regression results for the same pairs of retailers as the 2007-2008 regression analysis shown in Figures 1 and O.1. The relationship between online sales of a retailer and its offline presence, measured by proximity, is overall positive except for Walmart. Also, offline store presence of a retailer is overall negatively related to the online sales of a rival multichannel retailer, whereas its relationships to Amazon’s sales are ambiguous or slightly positive.

These results together with Figure 1 show mostly consistent qualitative patterns: offline store presence of a retailer is positively related to the sales of its own online store but negatively related to those of a rival retailer, except for Amazon. As discussed in the main text, however, these relationships are just descriptive and not necessarily causal. We discuss our formal approach to causal estimation and its empirical results in the main text.

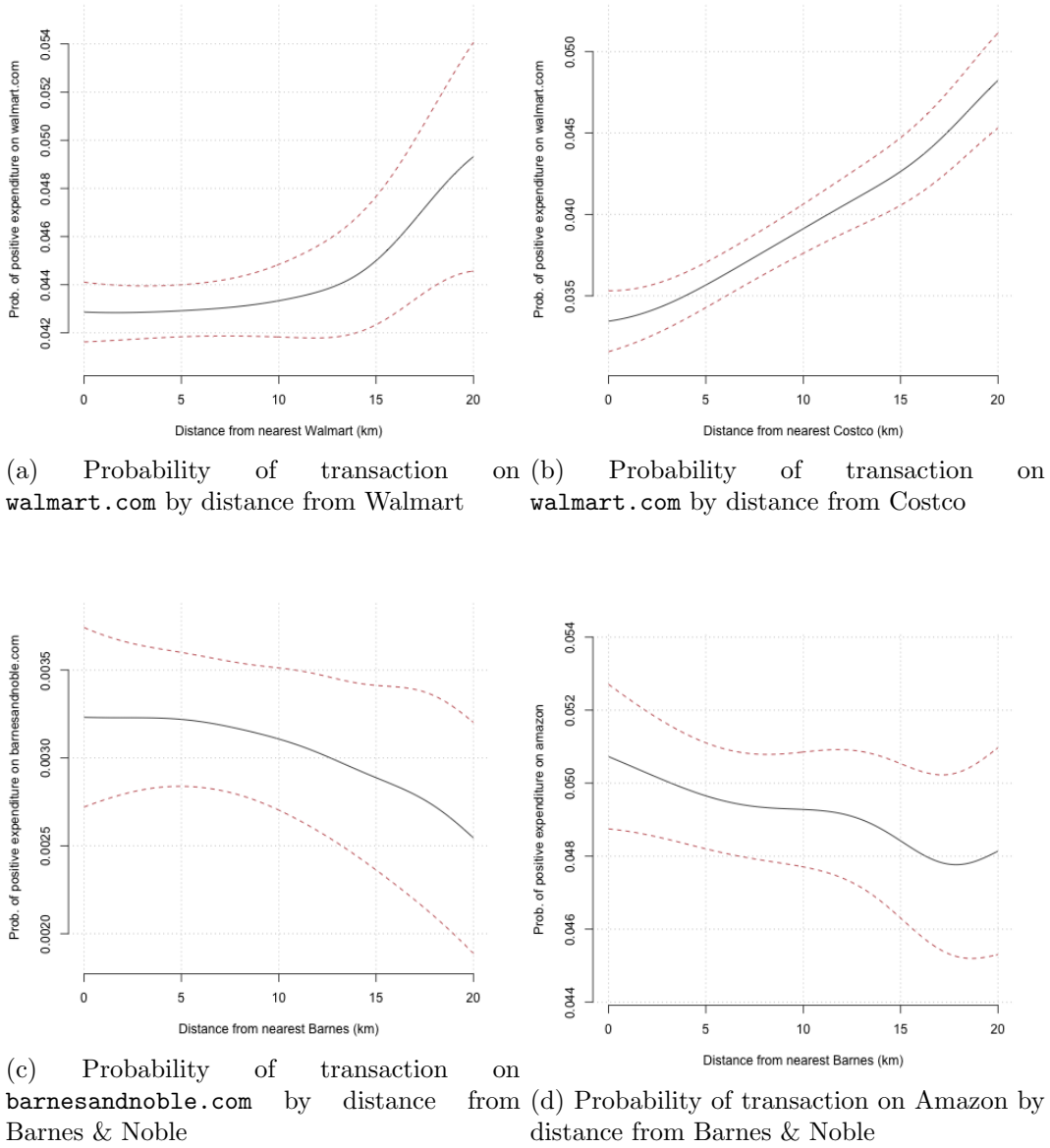
Figure O.1: Additional regressions of online spending on distance from retailer, 2007–2008



### O.3 Robustness to alternative specifications

In this section, we evaluate robustness of our main results shown in Section 6 to alternative specifications. Specifically, we show that the qualitative results of overall and store-specific regressions remain unchanged if we change functional forms (from linear to Poisson) or

Figure O.2: Additional regressions of online spending on distance from retailer, 2017–2018

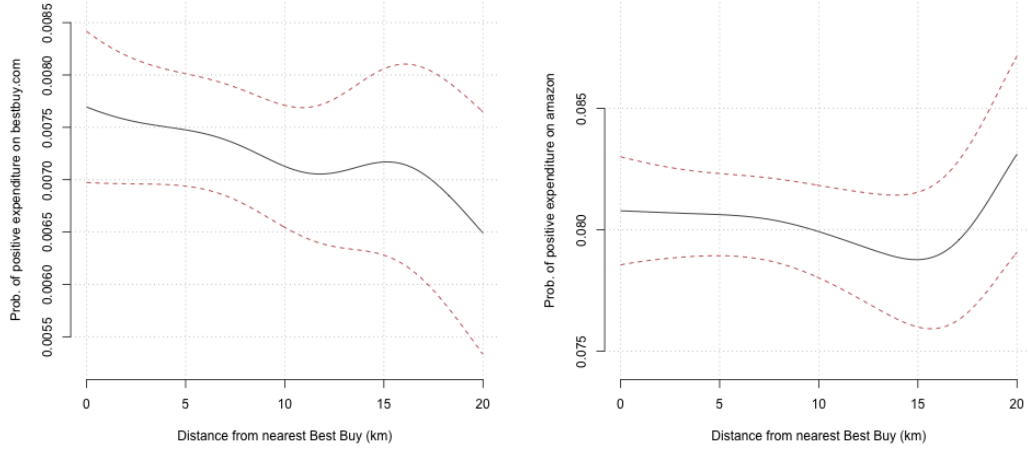


dependent variables (from expenditure levels to positive-spending indicator<sup>1</sup>). For the sake of space, we only present the results for 2007–2008. Additional results with county fixed effects are reported separately in Appendix O.4.

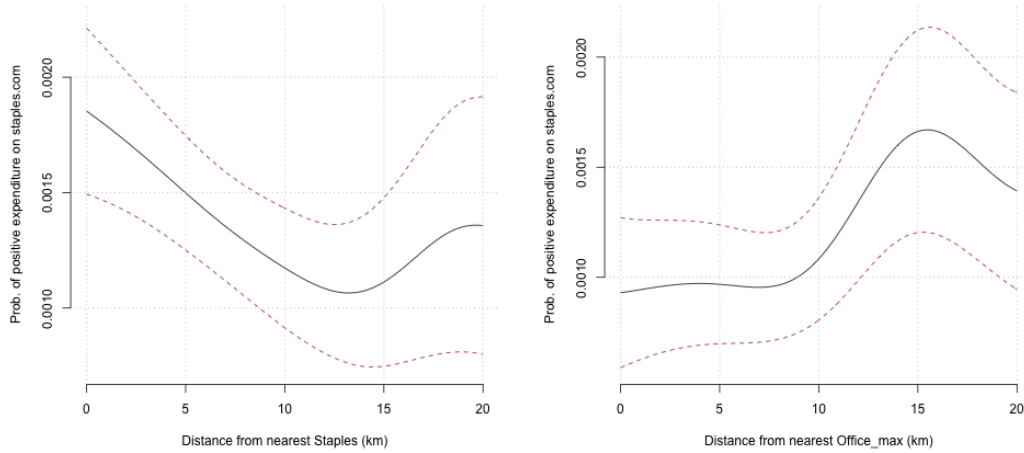
**Overall regressions.** Tables O.2 presents the results of overall regressions under various specifications. Panel O.2a replicates the main result 9a for ease of comparison. For large cross-category retailers, the effect of the number of stores on overall online sales is negative in all specifications, although the estimates are imprecise for positive-spending regressions. For bookstores and electronics retailers, the effect of the store count is positive for all specifications, though the estimates are sometimes imprecise. For office supplies retailers, the sign of

<sup>1</sup>We multiply the indicator by 100 so that the coefficients are interpretable as a percentage-point change as the number of stores increases by one.

Figure O.2: Additional regressions of online spending on distance from retailer, 2017–2018 (Continued)



(e) Probability of transaction on **bestbuy.com** by distance from Best Buy (f) Probability of transaction on Amazon by distance from Best Buy



(g) Probability of transaction on **staples.com** by distance from Staples (h) Probability of transaction on **staples.com** by distance from OfficeMax

the estimated effect depends on specifications.

**Store-specific Poisson expenditure regressions.** Tables O.3 through O.6 show the estimates of coefficients, rival effects, CCCs and own effects from Poisson expenditure regressions. For cross-category retailers and bookstores, we observe the same patterns as in our main results in Tables 11 and 13: (i) The own coefficients are positive and rival coefficients are often negative. (ii) The rival effects are negative and the CCCs are positive and larger in magnitude than the rival effects (implying positive own effects), except Amazon as a bookseller. (iii) Amazon faces weaker rival effects than multichannel competitors. Also, for electronics retailers and office supplies retailers, Tables O.5 and O.6 replicate the same qualitative patterns as in Tables 15 and 17. For electronics, Best Buy and Circuit City stores impact respective own online sales positively and the other's online sales negatively, whereas the own effects of

Apple and Radio Shack are negative. For office supplies, the effects of offline stores of a retailer on the sales of its own online channel are all positive. The estimates of rival effects, CCCs and own effects in Tables O.5 and O.6 have the same signs as those in Tables 15 and 17, and the magnitude is somewhat similar especially for electronics.

**Store-specific positive-spending regressions.** Tables O.7 through O.10 present the results of linear positive-spending regressions. The results are qualitatively similar to the main results, typically exhibiting negative rival effects and positive and larger CCCs, especially for cross-category retailers and bookstores. This suggests that our main results are not driven by the choice of studying the impact of offline retail presence on the intensive margin, rather than the extensive margin, of online purchase behavior.

Table O.2: Overall spending regressions

(a) 2007–2008 (expenditures, linear)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
N. Stores: Total	−11.754*** (2.476)	0.789*** (0.190)	2.517** (1.199)	0.468 (0.771)
Mean dep. var.	187.35	9.14	47.37	12.91
Observations	145,345	146,506	146,404	146,765

(b) 2007–2008 (expenditures, Poisson)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
N. Stores: Total	−0.053*** (0.0005)	0.096*** (0.002)	0.062*** (0.001)	0.049*** (0.002)
Mean dep. var.	187.35	9.14	47.37	12.91
Observations	145,345	146,506	146,404	146,765

(c) 2007–2008 (positive spending, linear)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
N. Stores: Total	−0.250 (0.300)	1.121*** (0.157)	0.189 (0.213)	−0.027 (0.107)
Mean dep. var.	51.99	12.49	15.97	3.66
Observations	146,873	146,873	146,873	146,873

(d) 2007–2008 (positive spending, Poisson)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
N. Stores: Total	−0.002 (2.511)	0.097 (0.192)	0.016 (1.171)	−0.005 (0.821)
Mean dep. var.	51.99	12.49	15.97	3.66
Observations	146,873	146,873	146,873	146,873

Note: This table presents the coefficients from the regressions of overall spending measures on the number of offline stores in each category. Panel O.2a replicates the benchmark results of linear expenditure regressions and panel O.2b displays the results of Poisson expenditure regressions. Panels O.2c and O.2d display the results of linear and Poisson regressions, respectively, using the indicator of positive overall spending as a dependent variable. The positive-spending indicator is rescaled so that the coefficients represent a percentage-point change in the probability of positive spending when the number of stores is increased by one. The “Mean dep. var” row presents the averages of the dependent variable.

Table O.3: Store-specific cross-category spending in 2007–2008 (Poisson)

(a) Coefficients

	Spending			
	amazon	costco.com	target.com	walmart.com
	(1)	(2)	(3)	(4)
N. Stores: Costco	0.034*** (0.001)	1.038*** (0.004)	0.064*** (0.003)	0.020*** (0.002)
N. Stores: Target	−0.025*** (0.002)	−0.005 (0.004)	0.129*** (0.004)	−0.157*** (0.002)
N. Stores: Walmart	−0.084*** (0.001)	−0.158*** (0.003)	−0.175*** (0.003)	0.142*** (0.002)
Mean dep. var.	14.10	2.51	3.20	5.71
Observations	146,451	146,857	146,770	146,694

(b) Rival effects, CCCs and own effects

	amazon	costco.com	target.com	walmart.com
	(1)	(2)	(3)	(4)
Rival	−0.015 (0.000)	−0.036 (0.001)	−0.035 (0.001)	−0.045 (0.001)
CCC		1.415 (0.009)	0.100 (0.003)	0.106 (0.001)
Own		1.378 (0.009)	0.065 (0.002)	0.062 (0.001)

Note: See the notes for Table 11.



Table O.4: Store-specific books spending in 2007–2008 (Poisson)

(a) Coefficients

	amazon	Spending barnesandnoble.com	booksamillion.com
	(1)	(2)	(3)
N. Stores: Barnes	0.023*** (0.003)	0.402*** (0.007)	0.130*** (0.025)
N. Stores: Books-a-Million	0.054*** (0.003)	−0.074*** (0.007)	0.660*** (0.020)
N. Stores: Borders	0.076*** (0.002)	−0.239*** (0.006)	−0.296*** (0.023)
N. Stores: Other	0.111*** (0.002)	−0.041*** (0.006)	−0.162*** (0.019)
N. Stores: Waldenbooks	−0.003 (0.002)	0.117*** (0.005)	−0.181*** (0.021)
Mean dep. var.	5.53	0.86	0.06
Observations	146,629	146,819	146,869

(b) Rival effects, CCCs and own effects

	amazon	barnesandnoble.com	booksamillion.com
	(1)	(2)	(3)
Rival	0.030 (0.000)	−0.028 (0.001)	−0.054 (0.004)
CCC		0.292 (0.006)	2.149 (0.108)
Own		0.264 (0.005)	2.095 (0.108)

Note: See the notes for Table 11.

Table O.5: Store-specific electronics spending in 2007–2008 (Poisson)

(a) Coefficients

	Spending				
	amazon	apple.com	bestbuy.com	circuitcity.com	radioshack.com
	(1)	(2)	(3)	(4)	(5)
N. Stores: Apple	0.066*** (0.003)	−0.061*** (0.003)	−0.160*** (0.003)	−0.114*** (0.004)	0.686*** (0.022)
N. Stores: Best Buy	−0.011*** (0.004)	−0.121*** (0.005)	0.238*** (0.005)	−0.268*** (0.005)	0.147*** (0.028)
N. Stores: Circuit City	0.017*** (0.004)	0.240*** (0.005)	−0.228*** (0.005)	0.256*** (0.005)	−0.112*** (0.028)
N. Stores: Radio Shack	0.112*** (0.005)	0.221*** (0.005)	0.090*** (0.006)	0.067*** (0.006)	−0.635*** (0.024)
Mean dep. var.	3.22	2.39	2.31	2.13	0.08
Observations	146,819	146,853	146,847	146,850	146,869

(b) Rival effects, CCCs and own effects

	amazon	apple.com	bestbuy.com	circuitcity.com	radioshack.com
	(1)	(2)	(3)	(4)	(5)
Rival	0.025 (0.001)	0.059 (0.001)	−0.039 (0.001)	−0.044 (0.001)	0.200 (0.009)
CCC		−0.121 (0.004)	0.185 (0.004)	0.214 (0.004)	−0.394 (0.013)
Own		−0.061 (0.003)	0.146 (0.003)	0.170 (0.004)	−0.194 (0.007)

Note: See the notes for Table 11.

Table O.6: Store-specific office supplies spending in 2007–2008 (Poisson)

(a) Coefficients

	Spending			
	amazon	officedepot.com	officemax.com	staples.com
	(1)	(2)	(3)	(4)
N. Stores: Office Depot	0.411*** (0.022)	0.743*** (0.003)	−0.464*** (0.007)	−0.073*** (0.002)
N. Stores: Office Max	0.091*** (0.016)	0.160*** (0.002)	0.778*** (0.010)	−0.221*** (0.002)
N. Stores: Other	−0.302*** (0.018)	−0.118*** (0.003)	−0.196*** (0.008)	−0.168*** (0.002)
N. Stores: Staples	0.096*** (0.017)	−0.024*** (0.002)	−0.318*** (0.006)	0.661*** (0.003)
Mean dep. var.	0.07	3.59	0.33	4.54
Observations	146,870	146,856	146,869	146,848

(b) Rival effects, CCCs and own effects

	amazon	officedepot.com	officemax.com	staples.com
	(1)	(2)	(3)	(4)
Rival	0.038 (0.005)	0.001 (0.001)	−0.130 (0.001)	−0.068 (0.000)
CCC		0.477 (0.003)	0.738 (0.010)	0.473 (0.002)
Own		0.478 (0.003)	0.607 (0.010)	0.405 (0.002)

Note: See the notes for Table 11.

Table O.7: Store-specific cross-category positive spending in 2007–2008

(a) Coefficients

	Probability of Positive Spending			
	amazon	costco.com	target.com	walmart.com
	(1)	(2)	(3)	(4)
N. Stores: Costco	0.051 (0.177)	0.364*** (0.037)	0.100 (0.097)	−0.024 (0.118)
N. Stores: Target	0.135 (0.205)	0.061 (0.038)	0.380*** (0.108)	−0.863*** (0.149)
N. Stores: Walmart	−0.599*** (0.186)	−0.212*** (0.047)	−0.532*** (0.101)	1.011*** (0.123)
Mean dep. var.	14.35	0.54	3.48	6.08
Observations	146,873	146,873	146,873	146,873
R <sup>2</sup>	0.090	0.014	0.032	0.050

(b) Rival effects, CCCs and own effects

	amazon	costco.com	target.com	walmart.com
	(1)	(2)	(3)	(4)
Rival	−0.006 (0.003)	−0.066 (0.022)	−0.039 (0.012)	−0.048 (0.008)
CCC		0.628 (0.055)	0.093 (0.022)	0.118 (0.013)
Own		0.562 (0.053)	0.054 (0.015)	0.070 (0.008)

Note: See the notes for Table 11.

Table O.8: Store-specific books positive spending in 2007–2008

(a) Coefficients

	Probability of Positive Spending		
	amazon	barnesandnoble.com	booksamillion.com
	(1)	(2)	(3)
N. Stores: Barnes	0.137 (0.159)	0.660*** (0.076)	−0.005 (0.024)
N. Stores: Books-a-Million	0.303* (0.156)	−0.238*** (0.071)	0.122*** (0.029)
N. Stores: Borders	0.483*** (0.149)	−0.351*** (0.077)	−0.046** (0.021)
N. Stores: Other	0.753*** (0.134)	−0.013 (0.065)	−0.005 (0.019)
N. Stores: Waldenbooks	0.073 (0.128)	−0.023 (0.063)	−0.039** (0.017)
Mean dep. var.	8.28	1.83	0.13
Observations	146,873	146,873	146,873
R <sup>2</sup>	0.061	0.014	0.003

(b) Rival effects, CCCs and own effects

	amazon	barnesandnoble.com	booksamillion.com
	(1)	(2)	(3)
Rival	0.024 (0.003)	−0.039 (0.009)	−0.079 (0.028)
CCC		0.249 (0.028)	1.653 (0.353)
Own		0.210 (0.024)	1.574 (0.351)

Note: See the notes for Table 11.

Table O.9: Store-specific electronics positive spending in 2007–2008

(a) Coefficients

	Probability of Positive Spending				
	amazon	apple.com	bestbuy.com	circuitcity.com	radioshack.com
	(1)	(2)	(3)	(4)	(5)
N. Stores: Apple	0.227*** (0.074)	0.029 (0.048)	−0.116** (0.053)	−0.107** (0.053)	0.016 (0.018)
N. Stores: Best Buy	−0.080 (0.097)	−0.009 (0.062)	0.226*** (0.072)	−0.225*** (0.067)	−0.014 (0.024)
N. Stores: Circuit City	−0.067 (0.094)	0.075 (0.057)	−0.156** (0.072)	0.333*** (0.064)	0.014 (0.023)
N. Stores: Radio Shack	0.157 (0.104)	0.058 (0.061)	0.005 (0.072)	0.077 (0.064)	−0.004 (0.027)
Mean dep. var.	1.83	0.68	0.89	0.77	0.11
Observations	146,873	146,873	146,873	146,873	146,873
R <sup>2</sup>	0.024	0.006	0.008	0.010	0.001

(b) Rival effects, CCCs and own effects

	amazon	apple.com	bestbuy.com	circuitcity.com	radioshack.com
	(1)	(2)	(3)	(4)	(5)
Rival	0.015 (0.009)	0.029 (0.016)	−0.047 (0.019)	−0.049 (0.020)	0.028 (0.058)
CCC		0.016 (0.082)	0.193 (0.059)	0.315 (0.065)	−0.039 (0.125)
Own		0.044 (0.073)	0.146 (0.046)	0.266 (0.051)	−0.011 (0.086)

Note: See the notes for Table 11.

Table O.10: Store-specific office supplies positive spending in 2007–2008

(a) Coefficients

	Probability of Positive Spending			
	amazon	officedepot.com	officemax.com	staples.com
	(1)	(2)	(3)	(4)
N. Stores: Office Depot	0.026 (0.018)	0.277*** (0.031)	−0.018 (0.020)	−0.145*** (0.048)
N. Stores: Office Max	0.009 (0.014)	−0.005 (0.032)	0.047*** (0.012)	−0.151*** (0.039)
N. Stores: Other	−0.016 (0.016)	−0.051 (0.034)	−0.006 (0.017)	−0.075* (0.044)
N. Stores: Staples	0.006 (0.013)	−0.056* (0.032)	−0.033** (0.016)	0.276*** (0.031)
Mean dep. var.	0.10	0.57	0.11	0.84
Observations	146,873	146,873	146,873	146,873
R <sup>2</sup>	0.002	0.008	0.003	0.011

(b) Rival effects, CCCs and own effects

	amazon	officedepot.com	officemax.com	staples.com
	(1)	(2)	(3)	(4)
Rival	0.028 (0.035)	−0.031 (0.015)	−0.073 (0.039)	−0.067 (0.012)
CCC		0.287 (0.030)	0.329 (0.070)	0.236 (0.019)
Own		0.257 (0.028)	0.256 (0.063)	0.169 (0.018)

Note: See the notes for Table 11.

Table O.11: 2007-2008 (linear, expenditures)

	Cross-category retailers	Bookstores	Electronics	Office supplies
	(1)	(2)	(3)	(4)
N. Stores: Total	-1.66 (3.78)	0.044 (0.305)	0.562 (1.86)	1.44 (1.19)
Observations	145,345	146,506	146,404	146,765

Note: This table presents the overall regression results analogous to those in Table 9, with county fixed effects in addition to the other individual and Waldfogel variables included as controls.

#### O.4 Regressions with county fixed effects

This section presents the results of regressions which include county fixed effects in addition to the other individual and Waldfogel variables as controls, and implied measures of rival effects, CCCs and own effects. As discussed in Section 4, we prefer to exploit both cross-sectional and time-series variation in store counts rather than use the latter alone, because the former is likely more informative and less error-driven than the latter. Still, the county fixed effects regressions and implied measures of rival effects, CCCs and own effects below exhibit patterns similar to our main results. Table O.11 presents the results of overall regressions. As in Table 9, it shows that the effect of the total number of stores on overall online spending is negative for cross-category retailers and positive for specialized retailers. Next, Tables O.12 through O.15 show store-level regression results and implied rival effects, CCCs and own effects. The qualitative patterns are again similar to the main results: rival effects are typically negative and CCCs are typically positive and larger in magnitude than the rival effect on the same retailer, especially for cross-category retailers and booksellers. One difference from our main results is that the estimates from county fixed effects regressions are less precise, which we attribute to measurement error or insufficient statistical power rather than sensitivity of the qualitative results.



Table O.12: Store-specific cross-category spending in 2007–2008 (with county fixed effects)

(a) Coefficients				
	amazon	costco.com	target.com	walmart.com
	(1)	(2)	(3)	(4)
N. Stores: Costco	-0.033 (0.516)	2.04*** (0.473)	-0.174 (0.220)	-0.186 (0.327)
N. Stores: Target	-0.636 (0.600)	-0.165 (0.551)	0.405 (0.256)	-0.262 (0.381)
N. Stores: Walmart	-1.02. (0.528)	0.277 (0.485)	-0.432. (0.225)	0.752* (0.335)
Observations	146,451	146,857	146,770	146,694
R2	0.07690	0.01427	0.03800	0.05319

(b) Rival effects, CCCs and own effects				
	amazon	costco.com	target.com	walmart.com
	(1)	(2)	(3)	(4)
Rival	-0.022 (0.009)	0.011 (0.093)	-0.054 (0.050)	-0.024 (0.023)
CCC		0.668 (1.478)	0.116 (0.130)	0.080 (0.071)
Own		0.679 (1.554)	0.062 (0.083)	0.056 (0.058)

Note: This table shows the results of store-specific regressions and implied rival effects, CCCs and own effects, as in Table 11, with county fixed effects in addition to the other individual and Waldfogel variables included as controls.

Table O.13: Store-specific books spending in 2007–2008 (with county fixed effects)

(a) Coefficients			
	amazon (1)	barnesandnoble.com (2)	booksamillion.com (3)
N. Stores: Barnes	0.526. (0.273)	0.168. (0.090)	-0.004 (0.023)
N. Stores: Books A Million	0.293 (0.322)	0.019 (0.106)	0.064* (0.027)
N. Stores: Borders	0.635* (0.268)	-0.246** (0.089)	-0.012 (0.022)
N. Stores: Other	0.222 (0.237)	-0.034 (0.079)	-0.007 (0.020)
N. Stores: Waldenbooks	0.023 (0.241)	0.198* (0.080)	-0.025 (0.020)
Observations	146,629	146,819	146,869
R2	0.05654	0.02645	0.02873
(b) Rival effects, CCCs and own effects			
	amazon (1)	barnesandnoble.com (2)	booksamillion.com (3)
Rival	0.033 (0.025)	-0.017 (0.030)	-0.087 (0.267)
CCC		0.132 (0.202)	1.884 (5.991)
Own		0.114 (0.179)	1.797 (5.728)

Note: See the notes for Table O.12.

Table O.14: Store-specific electronics spending in 2007–2008 (with county fixed effects)

(a) Coefficients

	amazon	apple.com	bestbuy.com	circuitcity.com	radioshack.com
	(1)	(2)	(3)	(4)	(5)
N. Stores: Apple	-0.034 (0.289)	-0.145 (0.386)	-0.598* (0.276)	-0.341 (0.287)	0.060* (0.028)
N. Stores: Best.buy	-0.359 (0.443)	0.279 (0.590)	0.472 (0.422)	0.037 (0.440)	0.037 (0.042)
N. Stores: Circuit.city	-0.124 (0.432)	0.402 (0.576)	-0.621 (0.412)	0.090 (0.429)	-0.021 (0.041)
N. Stores: Radio.shack	0.081 (0.452)	0.068 (0.602)	0.026 (0.431)	0.476 (0.449)	-0.118** (0.043)
Observations	146,819	146,853	146,847	146,850	146,869
R2	0.03052	0.01914	0.01926	0.01622	0.03163

(b) Rival effects, CCCs and own effects

	amazon	apple.com	bestbuy.com	circuitcity.com	radioshack.com
	(1)	(2)	(3)	(4)	(5)
Rival	-0.017 (0.018)	0.047 (0.184)	-0.079 (0.120)	0.025 (0.082)	0.194 (0.961)
CCC		-0.110 (0.402)	0.196 (0.339)	0.001 (0.166)	-0.702 (3.244)
Own		-0.063 (0.231)	0.117 (0.224)	0.026 (0.138)	-0.508 (2.289)

Note: See the notes for Table O.12.

Table O.15: Store-specific office supplies spending in 2007–2008 (with county fixed effects)

(a) Coefficients				
	amazon (1)	officedepot.com (2)	officemax.com (3)	staples.com (4)
N. Stores: Office Depot	0.066. (0.036)	2.38** (0.841)	0.079 (0.164)	0.370 (0.879)
N. Stores: Office Max	0.040 (0.033)	0.670 (0.776)	0.207 (0.152)	-2.14** (0.811)
N. Stores: Other	-0.043 (0.028)	-0.262 (0.648)	0.012 (0.127)	1.09 (0.678)
N. Stores: Staples	-0.023 (0.033)	0.600 (0.767)	-0.315* (0.150)	-0.613 (0.802)
Observations	146,870	146,856	146,869	146,848
R2	0.01001	0.02117	0.02391	0.02097

(b) Rival effects, CCCs and own effects				
	amazon (1)	officedepot.com (2)	officemax.com (3)	staples.com (4)
Rival	0.056 (0.359)	0.040 (0.109)	-0.097 (0.752)	-0.016 (0.048)
CCC		0.310 (0.641)	0.481 (4.046)	-0.054 (0.234)
Own		0.349 (0.737)	0.384 (3.300)	-0.069 (0.253)

Note: See the notes for Table O.12.