Online Appendix to

Cross-channel competition and complementarities in US retail

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O.1 Data processing

We chose the offline retailers to analyze (Table 2) based on national store counts reported by Tables O.1 through O.3. In particular, we chose retailers that appear within the top three retailers in their respective categories for at least one year, excluding retailers that specialize in a narrow subcategory of their respective retailing categories (e.g., we do not include a large religious book retailer, Family Christian Book Store, in our analysis).

We identify offline stores in the book and office supplies categories by querying the Data Axle data for business locations with the following six-digit Standard Industrial Classification (SIC) codes: 594201 ("Book Stores") for books and 594301 ("Office Supplies") for office supplies. For electronics, we query for stores with the following four-digit SIC codes: 5731 ("Radio, Television, and Consumer Electronics Stores"), 5734 ("Computer and Computer Software Stores"), and 5946 ("Camera and Photographic Supply Stores").

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Table O.1: Top book retailers by store count

Rank	2007 Retailer	Count	2008 Retailer	Count	2017 Retailer	Count	2018 Retailer	Count
1	Barnes and Noble	929	Barnes and Noble	929	Barnes and Noble	1012	Barnes and Noble	948
2	Borders Books and Music	566	Borders Books and Music	566	Books-a-Million	246	Books-a-Million	231
3	Waldenbooks	383	Waldenbooks	383	Follett Higher Education Group	150	Follett Higher Education Group	147
4	Family Christian Book Store	269	Family Christian Book Store	269	Half Price Books	144	Half Price Books	144
5	Books-a-Million	177	Books-a-Million	177	Scholastic Book Fairs	52	Scholastic Book Fairs	37

Table O.2: Top electronics retailers by store count

Rank	2007 Retailer	Count	2008 Retailer	Count	2017 Retailer	Count	2018 Retailer	Count
1	Radio Shack	5699	Radio Shack	5699	Best Buy	1171	Best Buy	1092
2	Best Buy	993	Best Buy	993	Radioshack	1133	Radioshack	286
3	Circuit City	753	Circuit City	753	Apple Store	282	Apple Store	278
4	Ritz Camera Ctr	413	Ritz Camera Ctr	413	Bose Corp	115	Eye Level Learning Ctr	167
5	Compusa	235	Magnolia Home Theatre	235	Spectrum	72	Microsoft Corp	110

Table O.3: Top office supplies retailers by store count

Rank	2007 Retailer	Count	2008 Retailer	Count	2017 Retailer	Count	2018 Retailer	Count
1	Staples	1609	Staples	1609	Staples	1380	Staples	1321
2	Office Depot	1307	Office Depot	1307	Office Depot	968	Office Depot	961
3	Office Max	1068	Office Max	1068	Office Max	622	Office Max	540
4	Cartridge World	77	Corporate Express	77	w b Mason	25	w b Mason	15
5	Corporate Express	55	Indoff Inc	55	Office Shop	14	Office Shop	13

Our procedure for categorizing websites begins by identifying the most popular sites in the Comscore browsing data by visits and unique users. In particular, for each of the time periods (i) January to February 2007, (ii) November to December 2008, (iii) January to February 2017, and (iv) November to December 2018, we construct a list of the top 500 sites by the number of visits in the Comscore browsing data as well as a list of the top 500 sites by the number of unique visitors in these data. We then concatenate these lists and drop duplicated sites from the combined list. For each site, we manually determine in which of the aforementioned categories the site belongs. Some sites are not well described by any of these categories, and we do not place these sites in any category. Additionally, we do not place sites that are not in our list in any category.

De Los Santos et al. [2012] find that the Comscore data was largely representative of on-line buyers in the United States via a comparison of Comscore's 2002 and 2004 datasets with data from the census and from a market research company. We arrive at a similar conclusion. Table O.4 characterizes the representativeness of Comscore panelists for 2007 by comparing these panelists to demographic distributions reported in publications for the 2007 Current Population Survey (CPS) of the US census. The table suggests that the Comscore panelists are broadly representative of US internet users, with a few exceptions. We replicate the finding of De Los Santos et al. [2012] that Comscore over-samples Hispanic people relative to the share of Hispanic internet users reported by the CPS Computer and Internet Supplement. We additionally find that Comscore over-samples white people and under-samples 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).

We focus on the 2007–2008 time period because the Comscore panel's coverage of trans-actions is lower in 2017–2018. In 2017 and 2018, for example, there were respectively 92 and 101 million US members of Amazon Prime, Amazon's premium subscription service (see here). Additionally, in an October 2017 survey, 92% of Prime members reported or-dering from Amazon at least once a month, as did 61% of survey respondents who did not subscribe to Prime (see here). Yet only 18.3% of Comscore panelists made a transaction

at Amazon in the 2017–2018 time period. Together, the facts that (i) most US consumers used Amazon in 2017–2018, (ii) Amazon reported only 81 million active accounts (Prime or non-Prime) in 2008 (see here), and (iii) the share of Comscore panelists using Amazon increased only from 14.3% in 2007–2008 to 18.3% in 2017–2018 suggest that the Comscore panel's coverage of e-commerce transactions markedly decreased between our time periods.

Table O.4: 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.

O.2 Additional data description

Table O.5: Regressions of online spending on high-income share

	costco.com	Spending target.com	walmart.com
	(1)	(2)	(3)
N. stores (log-transformed)	2.551***	0.040	−1.319***
	(0.159)	(0.059)	(0.113)
High income	0.659*	0.620***	−0.237
	(0.352)	(0.165)	(0.248)
High income (average)	2.667***	0.632**	−0.769*
	(0.638)	(0.300)	(0.447)
Mean dep. var.	2.51	3.19	5.70
Observations	147,836	147,749	147,673

Note: "N. stores (log-transformed)" is the log of one plus the number of the retailer's offline stores within 20km. "High income (average)" is the share of people within 20km that have household incomes exceeding $75,000. We include year fixed effects and the consumer characteristics listed in Section 2. (omitted from the table). The regression was conducted on the 2007–2008 data. To limit the influence of outliers, we trim observations for which the spending variable exceeding its 98th percentile conditional on positive spending.

Table O.6: Dependence of offline retail environment on local demographics

	Costco	Target	Walmart
	(1)	(2)	(3)
High income (average)	0.793***	1.015***	0.536***
	(0.008)	(0.011)	(0.009)
Observations	147,852	147,852	147,852
R^2	0.223	0.225	0.137

Notes: the table reports results from a panelist-level regression of the number of a retailer's stores within 20km of a panelist on variables characterizing the demographic profile of the the region within 20km of the panelist's ZIP code of residence. The regression was conducted on the 2007–2008 data. The measures of the demographic profile included are: share of population with household income exceeding $75,000 ("High income (average)"); the share of the population in white and black racial groups; the share of the population under the age of 40 and between the ages of 40 and 54; the average household size; the share with a child in the household; the share that is Hispanic; the share with broadband internet; and the share having graduated from college. All estimates except that for "High income (average)" are omitted from the table.

Table O.7: Price differences across retailers

(a) Books

Retailer	Price ratio with Amazon
barnesandnoble.com	1.23
booksamillion.com	1.08

(b) Electronics

Retailer	Price ratio with Amazon
bestbuy.com	1.08
circuitcity.com	1.06
apple.com	1.08

Notes: This table reports average ratios of products' prices at various multichannel retailers to their prices at Amazon. We compute these averages for the books and electronics categories, and we take the averages over distinct product/year pairs, weighting each by the observed number of corresponding transactions. The books considered are those for which we observe sales and that were either (i) a *New York Times* best-seller in either fiction or non-fiction for at least one week in 2007 or 2008 or (ii) one of Amazon's top selling books of 2007. This yields 26 titles across which we observe 1696 transactions. The included electronics are the iPod Shuffle (1GB), the iPod Nano (4GB), and the 40GB, 60GB, and 80GB versions of the PlayStation 3. We observe 355 iPod purchases and 89 PS3 purchases. We obtain a price for each product at each retailerby taking a median over transaction prices for the product.

O.3 Measures of rival effects and cross-channel complementarities

This section develops scale-free measures of offline stores' effects on online spending that facilitate comparisons across regressions. Let $\mathcal{J}^{\text{off}}$ ($\mathcal{J}^{\text{on}}$) denote the set of offline (online) retailers. We omit time period or category from our notation for simplicity, although we run our analysis separately for each period/category pair (e.g., books in 2007–2008).

We first define a measure of the effect of an offline store j on the spending at an online store s. Consumer i's expected spending at store s conditional on the regressors is

$$\mathbb{E}\left[y_{is} \mid n_i, z_i, q_i, \rho^{\text{FE}}_{R(i),s}, w_{r(i)}\right] = h(n_i)'\alpha_s + z_i'\tilde{\beta}_s + q_i'\gamma_s + \rho^{\text{FE}}_{R(i),s} + w_{r(i)}'\phi. \tag{1}$$

We measure the effect of n_{ij} on spending by the percentage change in expected spending when the number n_{ij} of stores of offline retailer j is exogenously increased from $\bar{n}_j$ to $\bar{n}_j + 1$, holding all other explanatory variables fixed at their mean values. Letting $\bar{x}$ denote the mean of a random variable x_i, we define the relative effect of j on s as

$$\begin{aligned}
\theta_{js} &= \frac{\mathbb{E}\left[y_{is} \mid \bar{n}_j + 1, \bar{n}_{-j}, \bar{z}, \bar{q}, \bar{\rho}_s, \bar{w}\right] - \mathbb{E}\left[y_{is} \mid \bar{n}_j, \bar{n}_{-j}, \bar{z}, \bar{q}, \bar{\rho}_s, \bar{w}\right]}{\mathbb{E}\left[y_{is} \mid \bar{n}_j, \bar{n}_{-j}, \bar{z}, \bar{q}, \bar{\rho}_s, \bar{w}\right]} \\
&= \frac{\left(h(\bar{n}_j + 1, \bar{n}_{-j}) - h(\bar{n}_j, \bar{n}_{-j})\right)'\alpha_s}{h(\bar{n})'\alpha_s + \bar{z}'\tilde{\beta}_s + \bar{q}'\gamma_s + \bar{\rho}_s + g(\bar{w})}.
\end{aligned} \tag{2}$$

We estimate θ_{js} by substituting our estimates of unknown parameters into (2).

Using the store-pair-specific effects defined by (2), we define the measures of rival and own effects. First, define the *store-specific average rival effect* as

$$\theta_s^{\text{rival}} = \sum_{j \in \mathcal{J}^{\text{off}} \setminus \{s\}} w_{js}^{\text{off}} \theta_{js} \tag{3}$$

where $\{w_{js}^{\text{off}}\}_j$ are weights for offline retailers j satisfying $\sum_{j \in \mathcal{J}^{\text{off}}} w_{js}^{\text{off}} = 1$ and $w_{ss}^{\text{off}} = 0$. We set w_{js}^{off} proportional to retailer j's number of stores in the analysis period.

The rival effect defined in (3) includes all effects of rival offline stores on online spending. Therefore, a positive value for this measure would indicate that a showrooming effect outweighs the competitive effect as long as the former effect is positive and the latter is negative. The converse of this statement is true for a negative rival effect.

We take θ_{ss} as a measure of *store-specific own effect*. This measure will be positive (negative) if cross-channel complementarities are larger (smaller) than cannibalization, assuming that the former is positive and the latter is negative.

We also interpret averages of our store-specific average rival and own effects for each retailing category in each time period. These averages are defined as

$$\bar{\theta}^{\text{rival}} = \sum_{s \in \mathcal{J}^{\text{on}} \cap \mathcal{J}^{\text{off}}} w_s^{\text{on}} \theta_s^{\text{rival}} \tag{4}$$

$$\bar{\theta}^{\text{own}} = \sum_{s \in \mathcal{J}^{\text{on}} \cap \mathcal{J}^{\text{off}}} w_s^{\text{on}} \theta_{ss} \tag{5}$$

for weights $\{w_s^{\text{on}}\}_s$ on stores s that sum to one across s. In practice, we set w_s^{on} proportional to the mean of y_{is}. Note that each of the average measures defined above is taken over multichannel retailers $s \in \mathcal{J}^{\text{on}} \cap \mathcal{J}^{\text{off}}$. We also compute an average of rival effects over all online retailers, including Amazon:

$$\bar{\theta}_{\text{incl}}^{\text{rival}} = \sum_{s \in \mathcal{J}^{\text{on}}} w_s^{\text{on}} \theta_s^{\text{rival}}.$$

O.4 Store-level Results

Table O.8: Store-specific cross-category spending in 2007–2008

(a) Coefficients

	Spending			
	amazon	costco.com	target.com	walmart.com
	(1)	(2)	(3)	(4)
N. Stores: Costco	0.708*	2.806***	0.240	0.363
	(0.412)	(0.397)	(0.176)	(0.249)
N. Stores: Target	−0.143	0.126	0.489***	−0.726***
	(0.419)	(0.424)	(0.180)	(0.270)
N. Stores: Walmart	−1.424***	−0.869**	−0.634***	0.697***
	(0.387)	(0.412)	(0.163)	(0.218)
Mean dep. var.	14.10	2.51	3.20	5.71
Observations	146,451	146,857	146,770	146,694
R^2	0.057	0.007	0.017	0.023

(b) Rival effects and own effects

	amazon	costco.com	target.com	walmart.com
	(1)	(2)	(3)	(4)
Rival	-0.018	-0.088	-0.056	-0.033
	(0.009)	(0.050)	(0.028)	(0.020)
Own		1.184	0.095	0.066
		(0.148)	(0.035)	(0.021)

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

(a) Coefficients

		Spending	
	amazon	barnesandnoble.com	booksamillion.com
	(1)	(2)	(3)
N. Stores: Barnes	0.025	0.495***	0.029
	(0.223)	(0.068)	(0.020)
N. Stores: Books-a-Million	0.386	−0.076	0.080**
	(0.238)	(0.075)	(0.033)
N. Stores: Borders	0.579***	−0.256***	−0.025
	(0.208)	(0.079)	(0.019)
N. Stores: Waldenbooks	0.061	0.144**	−0.019
	(0.187)	(0.060)	(0.014)
Mean dep. var.	5.53	0.86	0.06
Observations	146,629	146,819	146,869
R^2	0.034	0.008	0.002

(b) Rival effects and own effects

	amazon	barnesandnoble.com	booksamillion.com
	(1)	(2)	(3)
Rival	0.041	-0.048	-0.057
	(0.008)	(0.020)	(0.058)
Own		0.427	2.725
		(0.057)	(1.053)

Table O.10: Store-specific electronics spending in 2007–2008

(a) Coefficients

	Spending				
	amazon	apple.com	bestbuy.com	circuitcity.com	radioshack.com
	(1)	(2)	(3)	(4)	(5)
N. Stores: Apple	0.259	−0.238	−0.422	−0.240	0.052*
	(0.304)	(0.412)	(0.287)	(0.301)	(0.028)
N. Stores: Best Buy	0.173	−0.010	0.842***	−0.699*	0.015
	(0.360)	(0.502)	(0.326)	(0.402)	(0.028)
N. Stores: Circuit City	−0.143	0.266	−0.760**	0.739*	−0.001
	(0.365)	(0.455)	(0.350)	(0.390)	(0.037)
N. Stores: Radio Shack	0.633*	0.634	0.269	−0.084	−0.056
	(0.350)	(0.488)	(0.330)	(0.334)	(0.038)
Mean dep. var.	3.22	2.39	2.31	2.13	0.08
Observations	146,819	146,853	146,847	146,850	146,869
R^2	0.011	0.002	0.004	0.004	0.001

(b) Rival effects and own effects

	amazon	apple.com	bestbuy.com	circuitcity.com	radioshack.com
	(1)	(2)	(3)	(4)	(5)
Rival	0.022	0.042	-0.042	-0.040	0.111
	(0.011)	(0.024)	(0.020)	(0.023)	(0.072)
Own		-0.131	0.268	0.274	-0.300
		(0.227)	(0.103)	(0.145)	(0.188)

Table O.11: Store-specific office supplies spending in 2007–2008

(a) Coefficients

	Spending			
	amazon	officedepot.com	officemax.com	staples.com
	(1)	(2)	(3)	(4)
N. Stores: Office Depot	0.036	2.793***	−0.229*	−0.225
	(0.024)	(0.524)	(0.119)	(0.564)
N. Stores: Office Max	0.015	1.098**	0.222***	−1.013**
	(0.017)	(0.480)	(0.081)	(0.493)
N. Stores: Staples	0.019	0.075	−0.117	2.501***
	(0.018)	(0.463)	(0.094)	(0.388)
Mean dep. var.	0.07	3.59	0.33	4.54
Observations	146,870	146,856	146,869	146,848
R^2	0.001	0.003	0.001	0.005

(b) Rival effects and own effects

	amazon	officedepot.com	officemax.com	staples.com
	(1)	(2)	(3)	(4)
Rival	0.086	0.036	-0.178	-0.065
	(0.073)	(0.039)	(0.082)	(0.031)
Own		0.515	0.524	0.354
		(0.091)	(0.168)	(0.051)

O.5 Robustness to alternative specifications

In this section, we evaluate robustness of our main results shown in Section 4 to alternative specifications. Specifically, we show that the qualitative results reported in Tables 4 and 5 remain largely unchanged if we change functional forms (from linear to Poisson), dependent variables (from expenditure levels to positive-spending indicator[1]), the definition of local markets (from 20km distance bands to 50km distance bands), and region fixed effects (from census regions to states).

Tables O.12 through O.15 present the results of overall regressions with the aforementioned specification changes. All the estimates show the same sign as the main results in Table 4: the coefficients on the number of stores are negative for cross-category retailers whereas they are positive for specialized retailers. The precision of estimates is also more or less similar, except for positive spending regressions.

Tables O.16 through O.19 display category-level rival and own effects under alternative regression specifications. The results are again similar to the main results. Specifically, in almost all specifications, the own effects are positive and the rival effects are negative among multichannel retailers (with the only exception that office supplies' rival effect is small and imprecisely estimated positive when we use state fixed effects), and the rival effects become less negative (and positive for bookstores in particular) when Amazon is included.

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[1]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. Also, for Poisson regressions, we had numerical difficulty computing cross-equation covariance (i.e., the covariance for regression estimates across different stores), so the standard errors of category-level rival and own effects are computed ignoring the correlation.

Table O.12: Overall spending regressions (Poisson)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
N. Stores: Total	−0.044***	0.109***	0.067***	0.140***
	(0.001)	(0.002)	(0.001)	(0.002)
Mean dep. var.	187.35	9.14	47.37	12.91
Observations	145,345	146,506	146,404	146,765

Table O.13: Overall spending regressions (Positive spending)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
N. Stores: Total	−0.204	1.208***	0.163	0.057
	(0.341)	(0.171)	(0.218)	(0.115)
Mean dep. var.	51.99	12.49	15.97	3.66
Observations	146,873	146,873	146,873	146,873

Table O.14: Overall spending regressions (50km)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
N. Stores: Total	−19.987***	1.530***	4.101**	0.285
	(4.075)	(0.306)	(1.996)	(1.264)
Mean dep. var.	187.35	9.14	47.37	12.91
Observations	145,345	146,506	146,404	146,765

Table O.15: Overall spending regressions (State fixed effects)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
N. Stores: Total	−5.689*	0.797***	2.660**	2.059**
	(2.984)	(0.213)	(1.284)	(0.869)
Mean dep. var.	187.35	9.14	47.37	12.91
Observations	145,345	146,506	146,404	146,765

Note: Tables O.12 through O.15 present estimated coefficients from regressions of the overall spending on offline store counts, using the Poisson regression (O.12), positive spending ioutcome (O.13), 50km distance band (O.14), or state fixed effects (O.15). The "Mean dep. var" row presents the averages of the dependent variable (expenditures in dollars). Heteroskedasticity-robust standard errors in parentheses.

Table O.16: Category-level rival and own effects on expenditures (Poisson)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
Rival	-0.059	-0.043	-0.006	-0.045
	(0.001)	(0.002)	(0.000)	(0.001)
Rival (incl. amazon)	-0.036	0.030	0.003	-0.044
	(0.000)	(0.001)	(0.000)	(0.001)
Own	0.586	0.879	0.144	0.735
	(0.004)	(0.029)	(0.003)	(0.003)

Note: Each column presents the category-level average rival effects and own effects, computed using the estimates of store-specific Poisson regressions. "Rival (incl. amazon)" shows average rival effects including Amazon.

Table O.17: Category-level rival and own effects on expenditures (Positive spending)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
Rival	-0.061	-0.061	-0.020	-0.075
	(0.010)	(0.013)	(0.008)	(0.014)
Rival (incl. amazon)	-0.029	0.015	-0.005	-0.067
	(0.005)	(0.005)	(0.006)	(0.014)
Own	0.136	0.521	0.249	0.319
	(0.012)	(0.057)	(0.053)	(0.026)

Note: Each column presents the category-level average rival effects and own effects, computed using store-specific regressions of positive spending indicators. "Rival (incl. amazon)" shows average rival effects including Amazon.

Bibliography

Babur De Los Santos, Ali Hortaçsu, and Matthijs R. Wildenbeest. Testing models of consumer search using data on web browsing purchasing behavior. *American Economic Review*, 102(6):2955–2980, 2012.

Table O.18: Category-level rival and own effects on expenditures (50km)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
Rival	-0.042	-0.021	-0.002	-0.014
	(0.013)	(0.015)	(0.011)	(0.016)
Rival	-0.016	0.021	0.009	-0.014
(incl. amazon)	(0.007)	(0.006)	(0.008)	(0.015)
Own	0.134	0.281	0.080	0.243
	(0.017)	(0.047)	(0.056)	(0.025)

Note: Each column presents the category-level average rival effects and own effects, computed using store-specific regressions with 50km distance bands to define local markets. "Rival (incl. amazon)" shows average rival effects including Amazon.

Table O.19: Category-level rival and own effects on expenditures (State fixed effects)

	Cross-category retailers (1)	Bookstores (2)	Electronics (3)	Office supplies (4)
Rival	-0.030	-0.051	-0.015	0.009
	(0.019)	(0.021)	(0.014)	(0.026)
Rival	-0.023	0.029	-0.003	0.009
(incl. amazon)	(0.010)	(0.008)	(0.010)	(0.026)
Own	0.289	0.542	0.141	0.353
	(0.038)	(0.092)	(0.099)	(0.056)

Note: Each column presents the category-level average rival effect and own effects, computed using store-specific regressions with state fixed effects. "Rival (incl. amazon)" shows average rival effects including Amazon.